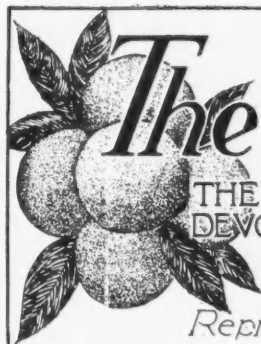



L.B. Newman
712 N. Vermont -



The Citrus Industry



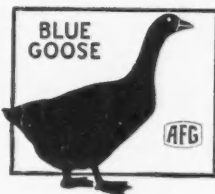
THE ONLY PUBLICATION IN THE WORLD
DEVOTED EXCLUSIVELY TO CITRUS FRUITS

Issued Monthly
Representative of every interest—
Representing no special interest

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TAMPA, FLA., JUNE, 1921

15 Cents a Copy



A Program for Success

The program of the American Fruit Growers, Incorporated, is to lead the way toward standardizing the fruit and vegetable industry by assembling under a nationally advertised trademark sufficient volume of fruits and vegetables of quality to supply the demand throughout the country, week after week, for products of a uniform, high standard.

This permanent program has already been inaugurated and is being successfully developed. Use of the advertised trademark and opportunity to share in the other benefits of the program are open to growers and shippers everywhere who will conform to the 100 per cent standard which the American Fruit Growers, Incorporated, has set for its goal.

--and how it operates

Growers and shippers who have done their part in stabilizing the fruit and vegetable industry by aiming at 100 per cent efficiency in production, picking, grading and packing, have a right to expect their marketing organization to do equally well in approaching the maximum of efficiency in distribution. The producer will get his entire share of the price the consumer pays only if a 100 per cent production organization is linked up with a 100 per cent marketing organization.

American Fruit Growers Inc.,
Orlando, Florida

Standard Fruit and Vegetable Packages of All Kinds

4-One Wirebound Fruit and Vegetable Packages

High Grade Orange Boxes

All of our packages are made from Selected Yellow Pine Veneer insuring the greatest possible strength.

Located as we are in the heart of the South Florida fruit and vegetable section, we can guarantee prompt service at all times.

Place your orders early—Our prices are right

MANATEE CRATE COMPANY

MANATEE, FLORIDA

RELIABLE SERVICE

Has always been the feature that has brought the same customers back year after year for us to handle their crops. They have found our prices always the most fair and our service the most satisfactory in every respect.

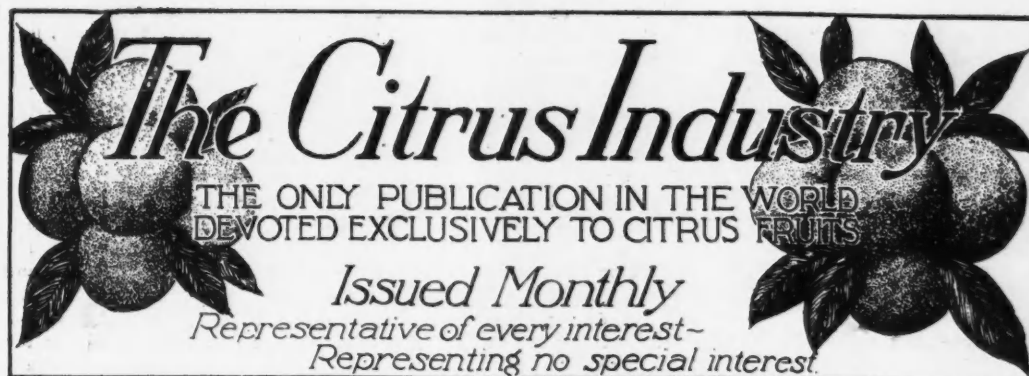
We buy your crop on the tree, insuring you of the quickest and safest returns.

We will be glad to serve you. Ask us for particulars.

S. J. SLIGH & CO.,

FRUITS AND VEGETABLES

ORLANDO - - - FLORIDA



Orlando--Capital of the Florida Citrus Belt

Orlando may or may not at some future time become the capital of Florida, or of a yet-to-be-constituted new state of South Florida. But whatever the future may hold in store in that regard, Orlando now is, and for years has been, proud claimant to the distinction of being the Capital of the Florida Citrus Belt. True, other aspiring cities have arisen from time to time to dispute the claim, but never with success. At least, never has the claim been made by any other city with sufficient insistence and persistence to convince Orlando or any Orlando citrus factor that the claim of this city was for a moment endangered. And the fact remains that when one desires to know "what is doing in citrus," he gravitates to Orlando as naturally as the Moslem seeks the tomb of Mohammed to pursue his devotions.

And why not?

Orlando is the seat of government of Orange county, located in the very heart of the favored regions of this noted land of the luscious orange and the appetizing grapefruit. Here some of the earliest experiments in citrus growing in the state were carried on, and here the citrus grove has persisted as the chief factor in the development and prosperity of both county and city. While other sections once prominent in the growing of citrus fruits have turned their attention to general farming, trucking, cattle raising or varied other pursuits, Orange county has persisted in its devotion to citrus and has stead-

fastly refused to worship at any other shrine. Other interests there are, it is true, but they are so overshadowed by the citrus industry that the stranger or the casual visitor is impressed by the importance of citrus and its allied interests alone.

Thus it is that in this land of lakes and rolling woodlands, amid blooming flowers blending their fragrance with the spicy odor of pines and the heavier and sweeter fragrance of magnolias, there has been built up this model community, "The greatest inland city of the Sunshine State."

Sitting proudly amid this pleasing environment, surrounded by orange groves which encroach upon the very business section of the city itself, proud old groves which seemingly would defy expansion in certain quarters; connected by the smoothest of brick pavements with other groves afar, the products of which are easily transported to this central market point, is it any wonder that Orlando has established for itself pre-eminence in the citrus world or that the great citrus factors have been attracted to its borders?

What Crowley once was and Beaumont now is to the rice industry; what Minneapolis is to wheat or Chicago to pork; what New Orleans is to cotton or Biloxi to shrimp; so is Orlando to the citrus industry of Florida—the center of attraction for the big factors which make citrus their watchword and their special care.

A Great Market Center

Years ago the importance of Orlando as a citrus center was recognized by some of the keenest men who have ever engaged in the packing and marketing of citrus fruits. Great marketing agencies were established and built up here, and the sound judgment and keen perception of the men who first chose Orlando as their field of operations is attested by the fact that many of these men are still actively engaged in citrus activities—with Orlando as the primary base of their operations.

So rapid was the development of the industry and the growth of the business handled by the Orlando factors, that several of the individual concerns engaged in the business found their operations expanding beyond the limit of individual endeavor and were forced to incorporate and perfect great organizations to care for the increasing volume of business handled. One of the first of these great organizations is the Standard Growers Exchange, which was organized to take over a business built up as an individual concern. Later, when the American Fruit Growers Inc. was established for nationwide operations, Orlando was chosen as the headquarters for its Florida citrus operations. These two organizations are among the greatest marketing concerns not only in Florida, but in all the land.

Other factors which have contributed and are still contributing to Orlando's prominence in the citrus field

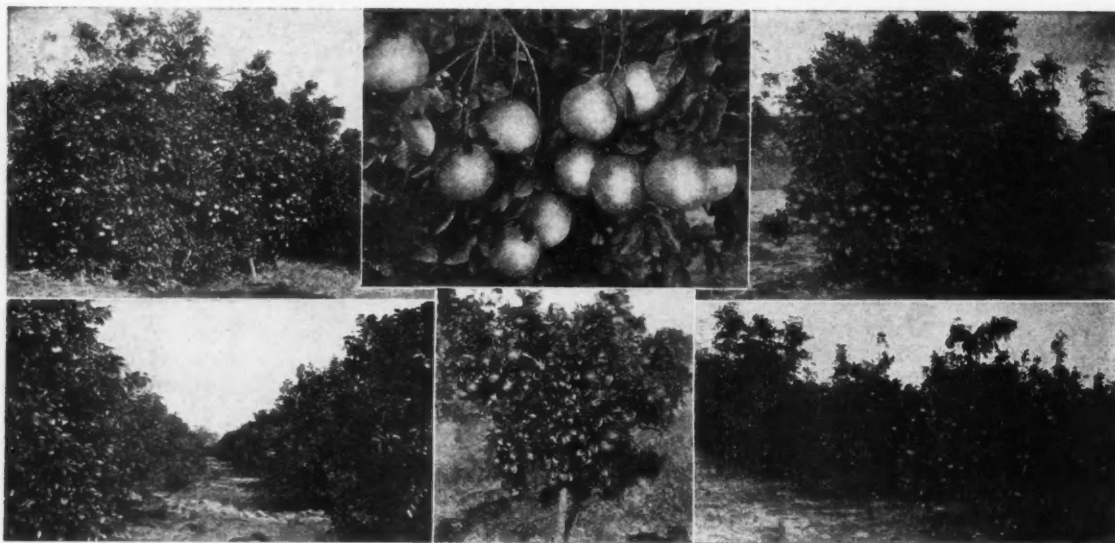
THE CITRUS INDUSTRY

are the following packers, buyers and shippers of fruits: Dr. P. Phillips, S. J. Sligh & Co., R. Daetwyler & Co., A. J. Nye, Walker Bros., Chester Fosgate & Co., Chase & Co., A. D. Symonds and the Florida Citrus Exchange. This latter organization has long recognized the prominence of Orlando in the Florida citrus field, but only during the last year has it maintained a packing house at this point, which previously has been served exclusively by independent interests.

Among the brokers operating regularly in this market are such well known men as Clarence Marsh, R. D. Keen, W. E. Richardson, C. W.

small part of the fruit handled by marketing organizations which maintain their headquarters in this city. Figures compiled from reports of business transacted by the various packers and shippers of Orlando, including the local output of the Exchange packing house and the house maintained here by Chase & Co., whose headquarters is in Jacksonville, show that more than 4,000,000 boxes, or one-third of the citrus crop of the state, was handled by Orlando factors during the season of 1920-21. Nothing can so clearly indicate the pre-eminence of Orlando in the citrus field or more fully justify its claim to the honor of being the

position among Florida cities in the citrus fruit field, Orlando has naturally attracted many interests closely allied to the production, packing and marketing of citrus fruits. Here are located great fertilizer factories and fertilizer warehouses, crate mills, machinery and grove supply houses, insecticide factories, picking bag factory, irrigating supply houses, engine factories, spraying distributors, citrus by-products factories and other lines directly associated with the citrus industry. Each of these concerns plays its important part in contributing to the greatness of Orlando, and each covers its special field in a thorough and satisfactory manner.



ORANGE COUNTY CITRUS TREES AND FRUIT

Chewning, G. E. James, Capt. Sanderson, Bulmer Bros., F. E. Godfrey, International Brokerage Company, Sam Shivers, R. Dixon, Grover Hupple, William Sprunce, J. A. Murrell, and others.

During the packing and shipping season, Orlando is indeed the scene of great activity. In Orlando and its sister city, Winter Park, whose borders almost touch, are located twelve citrus packing houses, having a combined output of more than three-quarters of a million boxes, representing a great share of the citrus production of Orange county, to which is added much fruit grown in adjoining counties but packed through the houses at Orlando and Winter Park.

One-Third of State Crop Handled Here

But the fruit actually packed and shipped from Orlando, great as it is in the aggregate, represents but a

"Capital of the Florida Citrus Belt," as these figures.

Of course, much of this fruit is not handled through Orlando, but must be counted as the business of Orlando factors, since the general headquarters, sales and traffic departments and accounting rooms are maintained here, and the business transactions are handled directly through the Orlando headquarters of the concerns submitting the figures on business handled within the state.

These figures have to do merely with citrus, and take no account of the vast business transacted by many of these marketing organizations in the handling of other fruits and vegetables. Were these subsidiary lines included, the figures would be much greater—but this article has to do solely with citrus, and with the prominence of Orlando in the citrus field.

Occupying as it does this leading

Then there are organizations among the packers and shippers themselves, organized and maintained to promote the common interests of all. A Traffic League, in which each of the packers and marketing organizations maintains membership, handles the transportation problems for the various member organizations. The Fruitmen's Club, another organization maintained by the independent shippers, is alert and active in promoting the interests of its members. Membership is open to all independent growers and shippers and its activities embrace the entire citrus-growing sections of the state.

Government Activities

Recognizing the prominent position held by Orlando in the Florida citrus field, the United States government maintains here a citrus experiment station, which is doing much to aid the growers in solving their grove problems and difficulties,

to eradicate diseases in the groves and to control insect and other pests which cause the growers of citrus fruits much financial loss and endless annoyance.

This station is in charge of Mr. W. W. Yothers of the Bureau of Entomology having to do with tropical and sub-tropical fruit insect investigations, with Mr. J. R. Winston of the Bureau of Plant Industry investigating plant diseases.

By practical grove demonstrations and personal work among the grove owners, these gentlemen have done much to bring about a better knowledge of citrus diseases and pests and the proper methods to be pursued in overcoming them. In this work they

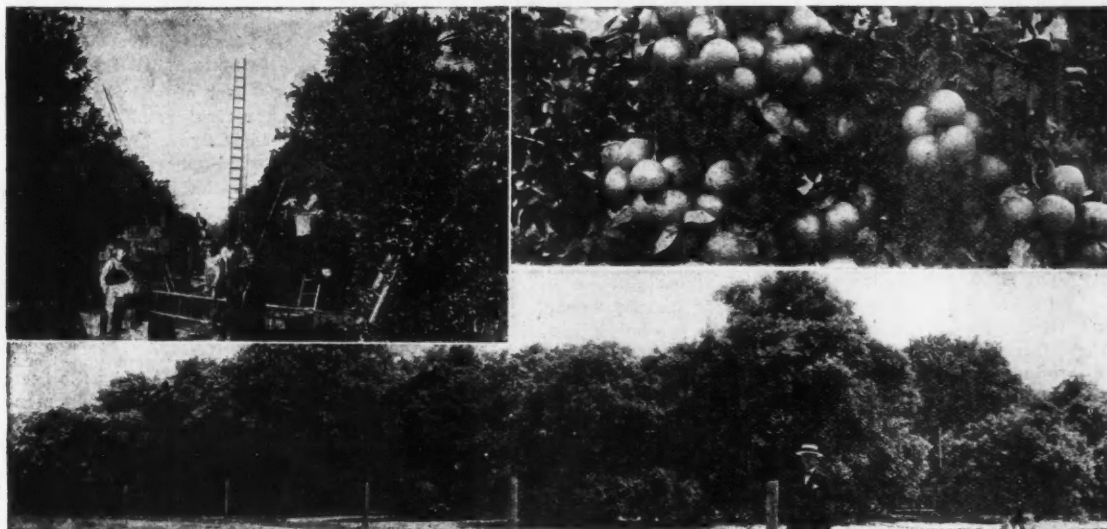
spreading oak, majestic pine and scented magnolia, while from well-kept lawns peep the brilliant blossoms of rose and jessamine, of oleander and hybiscus, while myriads of tropical plants and flowers lend their beauty and fragrance to the scene.

Orlando is a city of beautiful homes, from the palatial old Southern structure of colonial architecture to the modern bungalow of the latest design. Hundreds of new homes have been erected during the past year, the total building operations exceeding \$2,000,000—and still there has been no cessation in building operations.

In a business way, Orlando is no less favored. Exceptional facilities

general line of commercial activities outside of citrus.

As a winter resort, Orlando is one of the most popular of Florida cities, and easily the most popular among the interior cities. With its numerous lakes, its excellent fishing and hunting grounds, its golf links, its bathing piers and nearby pleasure resorts, it affords all that the heart of tourist could desire, with the added charm of the ideal Florida climate, numerous excellent driveways through pleasant woodlands and among blooming citrus groves, which bring to the visitor from the North visions of summertime, while yet his native hills are clad in verdure of white and nipping frosts stalk forth



GROVE SCENES NEAR ORLANDO DURING PICKING SEASON

have received the hearty co-operation and assistance of Mr. C. D. Klme, county agricultural agent for Orange county.

All of these gentlemen now have under way investigations into various problems of vital concern to growers which in their proper season will be presented to the Florida citrus growers through the columns of The Citrus Industry.

Wherever citrus rules, there beauty, enterprise and prosperity dwell. With citrus the predominant feature in Orlando's civic and commercial life, one would expect to find here a city of exceptional beauty, aggressive energy and abundant wealth—and one will not be disappointed, for here one finds this trinity manifest in superlative degree, each enhancing and supplementing the other.

Beauty and symmetry are in evidence on every hand—in the beautiful, well-paved streets, lined with

in, every line are provided by modern, up-to-the minute shopping centers which provide for everything which the taste or inclination of the resident or visitor may desire.

School, church and hotel facilities are of the best, yet the rapid development of the city is taxing their capacity and the growing demands of the community are to be provided for by the erection of still greater facilities along all these lines.

The banking facilities are adequate to needs of the business of this growing commercial center, four banks providing ample funds for the transaction of legitimate business operations. Citrus fruit shipping drafts passing through the Orlando banks during the past shipping season aggregated \$11,000,000. To this must be added the large sums handled by the local banks on shipments of other fruits and vegetables, and the vast volume of business transacted in the

to bite the tender flesh.

But, when all is said, Orlando owes its past, its present and its future greatness to just one thing, and that one thing is—citrus. Other Florida cities have a climate just as mild, skies just as bright, lakes as clear, woodlands as beautiful, flowers as brilliant and as fragrant. Other Florida cities, too (though Orlando may not admit it), have citizens just as enterprising, just as loyal, just as progressive. Other cities have just as fine streets and just as good avenues of ingress and egress; just as good shipping facilities and as much favorable publicity—and yet they have not Orlando's greatness, because they have not Orlando's citrus interests. Just so long as Orlando can maintain her present position of prominence in the citrus field, just so long will she continue to be, in name and in fact, the Capital of the Florida Citrus Belt.

Orange County Rightly Named

That Orange county is rightly named, no one who is acquainted with the citrus situation in Florida will for a moment question. Not that Orange county excels in extent or quality of fruit produced all other sections of the citrus belt, for that would be a statement too sweeping to admit of proof. There are other counties which rightly claim a greater acreage of trees, a greater number of trees, a larger number of grove owners. There are other sections which produce fruit just as palatable and which sells just as readily on the market, and yet which do not hold the prominence in the citrus world that is enjoyed by Orange county.

Why?

The answer is easily found.

Because Orange county is primarily a citrus-producing county. The percentage of fruit growers in comparison to the total number of people engaged in agricultural and horticultural pursuits is greater in Orange county than in other counties of the belt. Whereas other counties producing citrus, produce also general field crops, truck crops, livestock and other products in great quantities, Orange county produces comparatively little of such products. Its agricultural and horticultural activities are less diversified. Hence, citrus, by its great predominance, focuses attention to the exclusion of consideration of other crops, even though in the aggregate other crops are no mean part of the agricultural production of the county. True, in certain localities some favored crop may be grown to a large extent, but when the county is considered as a whole citrus becomes the one predominant feature, and it is this fact which makes one think of citrus whenever Orange county is mentioned.

According to the census figures, there were in 1919 a total of 1,093 farms in Orange county, containing an aggregate of 70,572 cultivated acres. It is estimated that fully one-fifth of this acreage was at that time planted to groves. During the two years since the census figures were made, it is estimated that fully 6,000 acres of young groves have been planted in the county, which would bring the present grove acreage up to the 20,000-acre mark. In 1919, according to the same census figures, there were approximately 500,000 citrus trees in the county. Plantings

since that time, it is estimated, will swell this figure by a quarter of a million trees, making the present total in the county approximately 750,000. The citrus production for the year 1919, according to the census figures, was 945,563 boxes, being 790,071 boxes of oranges and 155,492 boxes of grapefruit.

Besides Orlando, which is the principal packing center of the county and the leading shipping center of the state, citrus fruits are extensively grown and packed at the following towns and villages of the county: Oakland, Winter Garden, Tildenville, Winter Park, Apopka, Zellwood, Maitland, where one of the really big packing plants of the state is located, Conway, Pinecastle, Taft and Fort Christmas. At each of these centers adequate provision is made for the handling of the fruit and the financing of the growers.

The growers and packers of Orange county have developed some of the most noted and best selling brands on the market, and these brands are being pushed in the leading distribution centers of the North and East by strong marketing organizations which keep the merits of their brands constantly before the minds of the buying public.

But while it is true that Orange county long since attained and has since persistently maintained a leading position in the Florida citrus field, there are still in the county thousands of acres of undeveloped citrus lands which are available for development. With the bringing in of these lands, the citrus activities of Orange county bid fair to continue and to expand with the growing demand for citrus production in keeping with the development which is being carried on throughout the Florida citrus belt.

Recognizing the importance of the citrus industry to the development and welfare of the county, the county commissioners of Orange county, many of whom are themselves citrus growers, have offered every encouragement possible in connecting the farms with the towns, and the numerous towns with each other, by means of excellent hard-surfaced roads, which renders the movement of fruit both easy and expeditious. The growers of this county have little complaint to make of being unable to market their crops at the proper season by reason of badly built or

poorly maintained highways.

While old in years, Orange county is, in point of development, still in its infancy. It has yet thousands of acres of citrus land undeveloped, while its possibilities in other lines are beyond comprehension. The geographical position, varying topography and distribution of fertile soils of Orange county give it a peculiar place among the agricultural counties of the state. Its central location, chain of lakes, soil, varying from high, rolling, to low heavy truck soils, favor five important agricultural industries—citrus-fruit growing, general farming, livestock raising, truck farming and dairying.

The very best of all varieties of oranges, grapefruit and tangerines are produced in Orange county. The citrus-fruit industry of the county has had a remarkable growth during the past few years, and undoubtedly during the 1919-20 season, 3,000 acres were set to citrus fruits. Over 125,000 acres of excellent citrus soil remains to be developed. The section has natural protection, being in a chain of 1,500 lakes. Developments of groves are being made by the best citrus-fruit growers and business men of the country. These men are making citrus-fruit growing a permanent, profitable business, as well as a pleasure. Fruit drafts passing through the banks of Orange county last shipping season amounted to more than \$11,000,000.

In addition to citrus-fruit growing and in sections where citrus fruits are not grown, general farm crops are raised in abundance. Corn and hay to feed the farm stock is grown in every nook and corner of the county. Twenty-one different kinds of hay and forage crops are grown in the county. Sugar cane, Japanese cane, cowpeas, velvet beans, rye, oats, rape, rice, peanuts, cassava, sweet potatoes, Irish potatoes and numerous other farm crops are grown. Tractors and all kinds of modern farm implements are in use in the groves and on the farms. More than 100,000 acres of this type of soil await development.

It is difficult for the northern farmer to appreciate the peculiar advantages of Florida enabling him to work at the most pleasing time of the year. He may spend his summers at the seaside, which is but a comparatively short distance, and yet be able always to produce two good

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crops annually, and sometimes even three.

With an abundance of general farm crops growing, livestock naturally works into the system. A few of either Durocs, Poland Chinas, Berkshires or Hampshires are seen on every well-managed farm. On some farms the numbers run into the hundreds. Aberdeen-Angus and Herefords are crowding the native cattle off the ranches. The Texas fever tick will soon be a relic of the past. Hog cholera is no longer feared under present control measures. To the man who is partial to the raising of hogs, Orange county offers advantages seldom found else-

Only a few miles west of Orlando is the South Lake Apopka section, which holds the distinction of being one of the best sections of the state for the production of lettuce, cucumbers, peppers and numerous other highly specialized truck crops.

The Sub-Tropical Fair and Mid-Winter Exposition held in Orlando each year is one of the greatest fairs held in the state and serves to bring together a great exhibit of the horticultural and agricultural productions of the state. The citrus fruits shown at this fair include not alone those grown in Orange county, but bring into competition with them the finest specimens of the fruits grown in the

There are few "run-down" groves in Orange county. There are few uncared-for groves. The grove owners of this section are among the best in the state. They are close students and quick to adopt the better methods of culture, once these methods have been proven. The result of this adaptability is shown in the character of the groves one sees in passing over the fine roads of the county, and close inspection will show that the favorable impression gained from a distant view is more than justified by closer vision.

Groves are well cultivated, liberally fertilized, and as a rule intelligently sprayed. To these modern



DISPLAY OF AMERICAN FRUIT GROWERS, INC., AT SUB-TROPICAL FAIR AND MID-WINTER EXPOSITION, ORLANDO, FEBRUARY, 1921

where. The industry is only in its infancy. More than 100,000 acres are waiting for the livestock men.

Orlando is the headquarters of the poultry industry of the state. The Central Florida Poultry and Pet Stock Association meets here monthly. Poultry raising has already become a permanent industry of this section and is claiming the interest of the best talent and business ability of the country. This is one of the most dependable sources of an immediate cash income and requires but a small investment. The loss from disease is small. Fruit growers are anxious to have chickens raised in their citrus groves.

Indian River section of the East Coast, fruits from the Ridge and other noted citrus-producing sections of the state.

But one gets a true conception of the magnitude and immensity of the citrus industry of Orange county when he leaves the beaten paths of traffic and gets out into the by-ways of the county, where, bowling along between well-kept, thrifty groves on either hand, with glimpses here and there of crystal lake shimmering in the clear sunlight of a cloudless Florida sky, the real meaning of citrus culture and what it means in the progress and prosperity of the county is brought home to him.

methods, which appear to be the rule and not the exception, Orange county owes much of its prominence in citrus production. But, as in every line of activity and in every section of the citrus belt, there are exceptions to this rule of course, and until these exceptions have been brought to see the importance of adopting better methods, the maximum of attainment in citrus production of the county will not be achieved. Fortunately, the federal and local experiment agents are doing their best to inculcate modern methods and to correct shortcomings where they exist among growers.

S. J. SLIGH & CO., PACKERS

S. J. Sligh, head of the firm of S. J. Sligh & Co., packers and shippers of citrus fruits, Orlando, is, in point of active service, one of the oldest fruit men in the state. As Mr. Sligh himself expressed it, he is "the oldest and the youngest fruit dealer in Florida—not excepting 'Sandy'."

Mr. Sligh began active operations as a buyer and shipper of fruits and vegetables back in 1882, and during all these years he has been an active and aggressive factor in his operations. Of late, however, Mr. Sligh declares that he is endeavoring to concentrate his efforts to Orlando and confine himself to the handling of citrus fruits. This concentration, however, has been more fanciful than real, as Mr. Sligh still owns groves at Orlando, Loughman and Tampa,



and buys fruit all over the state. He conducts a packing house at Orlando and his annual business is somewhat in excess of \$1,000,000, which for a man who is endeavoring to curtail his business is a fairly sizable sum.

Mr. Sligh packs the well known and popular Elk brand of oranges and grapefruit, and he has built up a trade on this brand of which any packer might be proud. The packing house of S. J. Sligh & Co. is a well appointed plant with modern equipment and capable of handling a great quantity of fruit.

In his reminiscences of the early days of citrus culture in Florida, Mr. Sligh recalls that his father sold the original "Parson Brown" orange tree to the original Parson Brown. The tree was planted in the Brown grove at Webster, and from it sprang the fruit since known by that name and which has developed into one of the most popular of the early varieties grown.

THE FRUITMEN'S CLUB

One of the strong organizations of citrus men at Orlando is the Fruitmen's Club, an organization of independent growers and shippers. While originally organized by the independent growers and shippers of Orlando, its membership is open to any

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independent grower or shipper in the state, and now includes leading men of all sections.

The club was first organized to fight the box tax proposed for fighting citrus canker. Members of the Fruitmen's Club took the ground that as the leading industry of the state, citrus men were entitled to protection from the state, and that the state as a whole should bear the expense of eradicating the pest.

The club has since taken up other matters of interest to the industry, including traffic problems.

Matters of purely local or selfish interest have been excluded from the activities of the club, which has endeavored to work for the best interests of the industry as the members of the club saw it.

The club is not incorporated, but is an active force in independent circles, and holds frequent meetings for the consideration of matters of interest and concern.

THE TRAFFIC LEAGUE

Feeling the necessity for closer cooperation in the handling of the difficult problems confronting them, and to avoid useless duplication of effort, the traffic officials of the leading shipping organizations of Orlando formed the Orlando Perishable Traffic League.

The organization was perfected during last December and the roster of members includes the following firms: American Fruit Growers Inc., Standard Growers Exchange, Dr. P. Phillips Co., S. J. Sligh & Co., A. J. Nye, R. Daetwyler & Co., F. E. Godfrey, C. C. Fosgate Co., and possibly some others. While the original purpose of the league was to insure unity in the handling of strictly local affairs, such as car supply, claims, and minor rate adjustments, its policy is now to co-operate and work in harmony with shippers in all other sections of the state and to assist in the prosecution of any movement benefiting the industry as a whole.

The league has prepared voluminous data on the general rate situation, which will at the proper time be submitted to the interstate commerce commission in an effort to secure relief from the very burdensome transportation expenses, which at present are proving so detrimental to the entire perishable industry.

ALLEN'S FRUIT PICKING BAG

An important factor in every grove is the picking bag. For years growers experienced great annoyance and much financial loss from fruit bruised

in picking. Among those who suffered from this condition was Mr. Hugh C. Allen of Orlando. But unlike many of his fellow growers, Mr. Allen was not content to suffer loss without seeking a remedy.

One day, after a particularly trying time with negro pickers who insisted upon bruising an exceptionally heavy percentage of the fruit, Mr. Allen set his brain to work to devise a "fool-proof" picking bag. The re-



sult of his thought and labor was the Allen Picking Bag of today—a bag so constructed that fruit cannot be bruised either in dropping into or emptying from the bag.

That was 10 years ago. The first year Mr. Allen made 50 of these bags, which he gave away. The next year he made 150, and they also were given away.

Then he went into the manufacture of the bags, and each year his sales increased until last year he made and sold 10,500 bags. Most of these bags are sold to citrus growers in Florida, but a few have been introduced into northern apple orchards, where they have proved very popular. Some of the bags also were sold in Porto Rico, but owing to trade restrictions, this business was discontinued for a time. Next year, however, Mr. Allen expects to resume shipments to Porto Rico.

The bag holds one-half of a field packing box, empties from the bottom and avoids all danger of bruise in handling.

Last year Florida fell short by \$2,000,000 of producing enough hay for its own needs.

85C

EATSUM PRODUCTS CORPORATION

An important citrus by-product factor of Orlando is the Eatsum Products Corporation, of which C. J. Earley is the president. This concern has recently completed a new five-story factory building at Orlando, built of reinforced concrete. This plant has a capacity of four cars of finished product per day, utilizing about 400 boxes of culls daily. While operated only a short time during the past season, the season's output aggregated a half million dollars. The new plant has four times the capacity of the original plant and is the largest of its kind in the country.

The company has an authorized capital of \$3,000,000 and an investment of \$1,250,000. A bond issue of \$300,000 has recently been floated to carry on the work of the organization. Present plans contemplate great activity next season.

Mr. Earley says he looks for a good demand at moderate prices, but selling prices must be lowered. He believes that this can be done, but there must be a readjustment of transportation rates. Goods can be manufactured here cheaper than anywhere else, he says. He states that there is a big demand for citrus fruit drinks, provided they are genuine, and says that he has under contemplation plans for the sale of fruit juices which will require quadruple the present capacity of his plant. He has a product which he says will entirely supplant bogus citrus drinks and for which there is an exceptional demand.

Frank Monroe of Pittsburg, Pa., is the new secretary-treasurer of the Eatsum Products Corporation.

OVERSTREET SUPPLY COMPANY

The Overstreet Supply Company of Orlando was organized in July, 1920, succeeding the Overstreet Crate Company, with Senator M. O. Overstreet as president; R. T. Overstreet, vice-president; A. N. Goodwin, secretary-treasurer, and H. A. Parker, general manager.

The company operates a crate mill at Longwood and in addition handles the output of numerous other mills. In addition to its crate interests, the company owns large tracts of citrus lands in Orange county.

Mr. M. O. Overstreet is an old-time crate mill man, who formerly owned the big mill at Lockhart until it was destroyed by fire some years ago. Three years ago he constructed the mill at Longwood and it has since been operated by this company.

In addition to his other interests,

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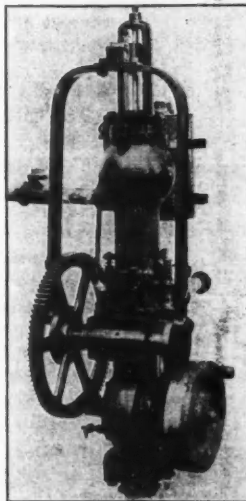
Senator Overstreet is chairman of the board of directors of the First National Bank of Orlando.

THE "H" JUNIOR PUMPING UNIT

This is a combined gasoline engine and force pump weighing 115 pounds and delivering 500 gallons of water per hour against a 25-pound pressure from a 25-foot lift.

It is manufactured by the South Florida Foundry and Machine Works at Orlando.

The plant is as easy to install as is an ordinary pitcher pump. The only mechanical ingenuity required is to put the flange on your well, then set the "H" Junior on this flange with the rubber gasket between and put in four bolts, running a pipe from the discharge to the water tank. A base is furnished at



a cost of \$5, so that the "H" Junior may be installed in the barn or small pump house or as far as floor space is concerned it may be installed on the back porch, as the entire outfit takes up a space less than 18 inches square and 30 inches high.

For irrigating a garden or operating lawn spray the "H" Junior is unsurpassed. This compact outfit is capable of operating 50 Skinner nozzles at one time if placed two feet apart in the pipe makes a spray line 100 feet long. In this way the family garden is always kept growing, even when Mother Nature falls down on her water supply.

THE SOUTHERN FERTILIZER CO.

The Southern Fertilizer Company of Orlando is one of the allied interests which go to make Orlando the Capital of the Florida Citrus Belt. This is the oldest fertilizer plant in Florida, the original plant having been built in 1886. The business

was incorporated in 1892, and since that time has shown a steady and very satisfactory growth. The business of the company is concentrated on Central Florida and special attention is given to citrus formulas. All of the officers and directors are heavy grove owners and practical fruit men, who have given careful study to the needs of citrus groves from the standpoint of fertilization.

The officers of the company are: L. L. Payne, president; T. P. Warlow, vice-president; J. P. Williams, secretary-treasurer; K. E. Kilbourn, sales manager.

CHASE & COMPANY

While not primarily an Orlando concern, Chase & Co., fruit growers, packers and shippers and dealers in grove and growers' supplies, are so intimately connected with Orlando that their activities must be considered as a part of the Orlando citrus interest.

With packing houses at many central points, a great marketing organization at Jacksonville, and supply houses at convenient points, Chase & Co. have for years occupied a prominent place in the citrus circles of the state, and are known as among the largest factors.

The Orlando interests of this concern are extensive and they maintain a large distributing supply house at Sanford and another at Winter Haven.

WRIGLEY ON ADVERTISING

I made "Wrigley" synonymous with chewing gum by advertising. When people saw "Wrigley's" they thought of gum. When they wanted gum they thought of "Wrigley's."

Advertising is the locomotive pulling your business along. Stop advertising, disconnect the locomotive and your business slows down to a stop. You'll lose a lot of valuable time getting started again.

An advertising splurge is seldom very effective. People forget your store, your business, as soon as you forget them. Keep them thinking about your store by thinking about the people and the only way to reach them is by advertising.

Remember when you advertise that you are advertising, not boasting.

Don't spread your advertising out too thin!

The newspapers are one of the most effective methods of advertising, for many obvious reasons. Practically every one reads a newspaper. —William Wrigley, Jr., in Chicago American.

The Citrus Industry

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A GOOD MOVE

MR. WILMON NEWELL, dean of the College of Agriculture, University of Florida, has inaugurated an innovation which means much to the graduates of the College of Agriculture and to the citrus growers of the state.

Recognizing that the technical training received by students of the university, while good in itself, is not all of the training which the student should receive to make the most of himself and his opportunities in after life, Mr. Newell has adopted a plan by which he hopes to aid both the students and the growers of Florida.

Recently Mr. Newell addressed a number of prominent citrus growers of the state, the heads of various growers' organizations and marketing concerns, outlining his plans and soliciting their co-operation.

Mr. Newell's plan is to place his students, upon graduation, in active service with growers and marketing organizations, with a view to giving them actual experience in the grove or counting room. By this means he hopes to benefit the graduates by adding to their technical training the actual experience of grove and market problems. On the other hand, their employers will benefit by the technical training which the young men have received in their college work. Thus the benefit will be mutual.

Mr. Newell has, we believe, found the growers and marketing organizations ready to meet him more than half way in this matter. They have been quick to realize the benefits to themselves, to the graduates and to the industry as a whole from putting into the service a lot of bright, virile young men, fully equipped with both technical and practical experience to meet the problems of the grove, the packing house or the market place.

While we are not advised in the matter, we presume that Mr. Newell is adopting the same plan in regard to graduates from other departments of the College of Agriculture as with those who have specialized in citrus work.

A number of prominent growers and packers have accepted the offer of Mr. Newell and have made place for young men from the university in their every day working organization. Among others, Mr. Hugh Macdonald of Fort Myers, large grove owner and manager of the Stripes Citrus Packing Co., has agreed to take two of the graduates for work in his groves. These young men go in to learn the business of grove management "from the ground up." They will be aided in their work by their

technical knowledge, but they will have no special privileges nor special emoluments, other than those earned by their superior ability should it develop. We understand also that a number of marketing organizations have notified Mr. Newell of their acceptance of his plans and their desire to co-operate fully in carrying out his purposes.

The outcome of this innovation will be watched with keen interest, and among growers generally both the hope and the belief exist that it will prove of wonderful benefit to all concerned—to the students, the growers who employ them and to the industry as a whole.

Mr. Newell is to be congratulated upon the interest he is taking in advancing the interests of the students and the state, and the people of the state are to be congratulated upon having such a man at the head of the College of Agriculture.

GETTING THE MOST OUT OF CITRUS

THE CARE of the citrus groves the next few months means a great deal in the quality and amount of shippable fruit, growers will pick from their trees next season, for these are the months when the pests flourish. It all takes us to the subject of spraying.

E. H. Favor, managing editor of the American Fruit Grower, a publication published at Chicago, was in Florida recently making a survey of the citrus industry for his paper. Mr. Favor besides being a newspaper man of considerable note, might almost be termed an expert along several horticultural lines, of which citrus is not the least, says Orlando Reporter-Star. In the neglect of many growers of their groves and the subjecting of them to the numerous pests that thrive on the citrus trees, Mr. Favor sees not only the loss of hundreds of thousands of dollars annually to the growers but a weakening of the Florida fruit market in the large purchasing centers of the north. Bright, pretty fruit cannot be grown on pest ridden trees, nor will the fruit from pest ridden trees command anything like the price that the bright fruit does, hence there should be a strong incentive to spray intensively.

In Mr. Favor's opinion "there are but three essential points to be taken into consideration when spraying, any one of which disregarded, will make the whole operation ineffective. These points are: the right mixtures to use; at the right time; in the right way. All the spraying in the world of some solutions have no effect upon some kind of pests, while all the mixture in the world of the proper materials might be used with no degree of success should they be put on at the wrong time, in like manner proper solutions put on at the right time but in the wrong way will also be ineffective."

It is our opinion the lack of interest shown by many growers regarding spraying is due to one of the three above mentioned causes. After having been persuaded to spray, the grower goes to the expense and time of buying the spray and applying it. But being inexperienced he applied it either too early or late, in the wrong way, or used the wrong solution. Finding as large a crop of pest after spraying as he did before, he naturally was discouraged and came to the conclusion it was all a humbug, money thrown away and time wasted.

Two weeks one way or the other, in spraying time, will give you a wonderful crop of pests. The surest way of being right is to see the county agent who can be seen most any time at his office in the county court house. "Orlando is fortunate in having one of the foremost experts on spraying for citrus pests in the United States," said Mr. Favor, "I am speaking of Mr. W. W. Yothers

in charge of the government experiment station here. People in the vicinity of Orlando by following his advice in spraying, could in a very short time rid the community of most of its pests which thrive on citrus stock, and by so doing could raise the price as well as the standard of their fruit in the northern markets."

EXPOSING THE FRUIT-JUICE FAKES

FRUIT-JUICE fakes are doomed. The department of agriculture has started a campaign against the misbranding of products labeled as pure fruit juice, but which are, in fact, nothing more than chemical imitations. The department has ruled that terms such as "ade," "squash," "punch," "crush," and "smash," when used in conjunction with the name of any fruit, can be applied legally only to beverages which contain the fruit or the juice of the fruit named.

There are honest concerns which are manufacturing products from fruit. They buy good fruit from the growers and turn it into a worth-while article, refreshing and healthful. Their products are met in the market by chemically made stuff that is dangerous, yet finds a sale through the fake names given them.

Orange growers have suffered because of the imitations. Not only has the juice of oranges been affected by the fakes containing little or no orange juice, but the reputation of pure orange juice has suffered. If the fakes can be wiped out, there will be a great demand for oranges and their juice. This means, of course, a better price for citrus fruits.

One of the chief reasons for the department's attitude toward these products, aside from correcting misleading features on the labels of foods coming within the jurisdiction of the federal food and drugs act, has been the healthful qualities of most juices. Orange juice in particular, as is well known, is frequently prescribed by physicians to children and convalescents, and the department has been very anxious that no false claims as to the presence of fruit juices shall be made on the labels of beverages.

Florida citrus-fruit growers ought to take a deep interest in the movement to kill off the fakes. California growers have secured the passage of a state law which dooms the fakes. The law is as follows:

An act to prevent fraud or deception in reference to beverages, and prescribing penalties for violation of the provisions hereof.

Section 1—No person, by himself, his agents, or servants, shall render, manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell or to use or to serve to patrons, customers, boarders, or inmates of any hotel, dwelling house, restaurant, public conveyance, boarding house, or any other place any misbranded beverage.

Sec. 2—Any beverage, drink, or potable liquid is hereby defined to be a "misbranded beverage" if it consists in whole or in part of a synthetic mixture, and

(a)—When sold, offered, or exposed for sale in a bottle, can, cask, keg, or other container, said container bears any statement, design, or device indicative of the name of any fruit or of the natural juice or extract thereof; or

(b)—When served to patrons, customers, boarders, or inmates of any hotel, dwelling house, or inmates of any hotel, dwelling house, restaurant, public conveyance, boarding house, or any other public place where a beverage, drink, or potable liquid is sold or offered or exposed for sale, or where it is mentioned on the menu card or similar notice or placard under a name indicative of the

name of any fruit or of the natural juice or extract thereof.

Sec. 3—Any person, firm, or corporation that violates any provisions hereof is guilty of a misdemeanor.

From a strictly commercial point of view, it is estimated that citrus-fruit growers will be benefited to the extent of at least half a billion dollars a year, since fully that amount of fake "fruit" drinks were sold last year.

OUR ORLANDO SPECIAL

THIS is a special Orlando number. The Citrus Industry has no excuse to make for presenting it. True, the issue itself might be more fully representative of the citrus interests of Orlando. It might have been more ably prepared and the ground more fully covered. But The Citrus Industry could have had no better subject for such an edition than Orlando—capital of the Florida Citrus Belt.

What is said in this issue of Orlando and Orange county, and of the varied citrus interests represented, is said in absolute good faith and in the belief that no word of exaggeration or untruth has been written.

What is said of Orlando detracts in no way from the glory of other citrus sections of the state. Each has its superior merits and each its peculiar claims. But there can be but one real citrus center—and for Florida Orlando holds that distinction. In the number and extent of its marketing organizations and allied interests, it stands foremost among the cities of the state. As such, it merits all that is said of it in this issue.

We believe that every Florida citrus grower and every individual interested in any way in citrus culture or the marketing of citrus fruits, will find in this issue many truths to merit his consideration.

RATES SHOW DOWNWARD TREND

AS AN indication that some railroad rates are beginning to show a downward trend may be cited the announcement of the Trans-Continental Freight Bureau of a reduction on vegetables, melons and apples from the Pacific Coast to points east of the Mississippi river. The rate on melons and vegetables is reduced from \$2.08 1/2 to \$1.75; on apples from \$1.68 to \$1.50. While this is not a great reduction, it is important as marking a downward tendency in rates. The ball has started down hill. Let's keep it rolling.

The June bloom is reported to be the heaviest that Florida has known for years. Much of the early drop occasioned by the drouth through March and April will be offset by the excessive June bloom, in the opinion of many experienced growers.

WANTS TO KEEP IT COMING

Youngstown, Ohio, June 3.

The Citrus Industry,
Tampa, Fla.

I am enclosing my personal check for \$2.00 to renew my subscription for two years. While there is still a year to run on the old subscription, I wish now to have the time extended as above, making three years paid from date.

I am very much pleased with your publication and the class of articles printed.

Very truly yours,

J. M. Woltz.

American Fruit Growers, Inc.

Orlando Division

While one of the youngest of the great marketing organizations handling citrus fruits in Florida, the American Fruit Growers Inc. has attained a position of prominence and importance not excelled by any other organization of its character.

Established in June, 1919, by men, who for years have been prominently identified with the growing and marketing of citrus fruits, it at once took position in the front ranks of the marketing organizations of the country.

The Florida business of the American Fruit Growers Inc. is handled in two separate divisions, the Orlando division being devoted exclusively to the handling of Florida citrus fruits, while the Sanford division has charge of the marketing of vegetables. This article deals entirely with the organization and business of the Orlando division.

Although entering a field already well covered by active, aggressive marketing organizations, the business of the American Fruit Growers Inc., during the first year of its existence, was not only gratifying to the management of the organization, but proved satisfactory to the clients handling their fruits through the Florida division. Indeed, during the first year of its operation, the business handled by the Orlando division attained a volume which was exceeded by few like organizations in the state. During the second year of its activities the volume of business increased 52 per cent. The contracts already signed for the coming season lead the management to believe that the increase in business next year will be fully 100 per cent over the business transacted during the year just closed. For an organization just closing its second year of business this is a showing of accomplishment which must be highly gratifying to the management.

The American Fruit Growers Inc. operated during the season of 1920-1921 seventeen separate packing houses, some of which are owned outright by the company, some operated under lease and others operated through a commercial arrangement with the owners. Next season the company will operate twenty packing houses in the state. Among the noted packers who have joined forces with the American Fruit Growers

Inc., since its organization, and whose fruit is now handled by this organization, are A. M. Klemm & Son of Winter Haven, Stripes Citrus Packing Company and the Lee County Packing Company of Fort Myers, and Theodore Strawn of DeLand, who recently affiliated himself with this organization. In addition to these prominent packers, each of whom has marketed his fruit under a well known and popular brand, many of the leading growers of the state have been attracted by the service offered by this organization and are now marketing their fruit through the American.

While the American Fruit Growers Inc. handles the business of growers and packers in practically any manner desired, it makes a specialty of f. o. b. sales and offers every encouragement and inducement to its clients to market their fruit in this manner. With this exceptional organization having sales managers in 135 of the leading distribution centers of the United States and Canada, and with sales houses in the cities of New York, Pittsburgh, Chicago and St. Louis, the American Fruit Growers Inc. keeps in constant touch with the market demands and the fruit supply in each of the consuming and distributing centers of the country. With this knowledge always at hand it is in position to eliminate entirely the old "hit or miss" plan of shipments, whereby one market might be glutted, while another was suffering from a shortage of fruit.

It is the aim of this organization, through its various sales managers, to build up a demand in the big distributing centers for a high grade of fruit, delivered direct from the packing houses in Florida to the distributing centers in the north. In this manner the use of the auction market has been largely eliminated. Where it is found necessary to resort to the auction market, the aim of the American Fruit Growers Inc. has been to offer only the choicest of fruits under well known brands, and by this method it has maintained a high price level on all offerings through auction markets.

Recently the American Fruit Growers Inc. has adopted "Blue Goose" as its trade-mark for its highest grade fruit. Under this trade-mark may be marketed the high

grade fruit of all clients whose products conform to the regulations of the organization in the matter of quality, grade and pack. During the past season fruit packed under the Blue Goose trade-mark has gained great popularity in the leading markets of the country, and has attained a record for top prices which has never been excelled. A campaign of national advertising is being carried on to popularize the Blue Goose trade-mark and clients of the American are receiving the benefits of this widespread co-operative advertising, which in years to come may be expected to still further enhance the profits of the accounts placed through this organization. The encouragement of f. o. b. sales and the introduction of the Blue Goose trade-mark have been two of the most important features of the marketing service offered by this organization, and in connection with the avowed purpose of the American to attain 100 per cent efficiency in service, have been responsible for much of the increase in high-class accounts which have recently come into the organization.

The Orlando division of the American Fruit Growers Inc. has been fortunate in the character of the men who have been in charge of the Florida organization from its inception. Mr. F. L. Skelly, manager of the Orlando division, came to this organization after long service as sales manager for the Florida Citrus Exchange, and with a record of achievement enjoyed by no other salesman in the citrus fruit field. With an intimate knowledge of the marketing conditions, and with rare judgment in the handling of citrus accounts, Mr. Skelly brought to the new organization knowledge and keen insight which at once placed the Florida division of the American Fruit Growers Inc. on a solid basis in the citrus field.

Mr. C. R. Pilkington, secretary of the Orlando division, was formerly connected with the firm of Crutchfield & Woodfolk, for many years leading factors in the production and shipment of Florida fruits. While with Crutchfield & Woodfolk Mr. Pilkington held a very important and confidential position, and these relations have been continued in his ca-

capacity of secretary of the Florida division.

The traffic department of the American Fruit Growers Inc., Orlando division, is in charge of Mr. C. A. Stewart, who came to the organization from the Seaboard Air Line. Mr. Stewart, previous to his connection with the American Fruit Growers Inc. had been in the traffic and transportation departments of various railroad organizations for fifteen years. He is thoroughly conversant with traffic matters and under his management the traffic affairs of the American are very ably handled.

The accounting department of the Orlando division is in charge of Mr. A. S. Derby, who formerly was engaged in the growing and packing of fruit at Cocoa. In connection with his father, Mr. Derby developed and popularized the Derby Winner brand of Indian River oranges and grapefruit, which has become one of the most popular brands on the market and one of the leading accounts handled by the American Fruit Growers Inc.

To the personnel of the Orlando organization and to the efficient corps of assistants whom they have gathered about them is due in a large measure the successful achievement of the American Fruit Growers Inc. during the past two years.

STOPPING THE RUST MITE

One of the most expensive guests the Florida citrus grower entertains is the rust mite. This minute pest attacks the pocket book from four directions.

First, it destroys the bright color of citrus fruits, causing the well-known russeted fruit which commands a lower price than if bright.

Second, it reduces the size of the fruit, making it necessary to use more to fill a box.

Third, it retards ripening.

Fourth, it interferes with the work of leaves and thereby injures the trees.

The individual mite is barely visible to the naked eye. Under a good lens it is seen to be a long tapering, yellow wedge. The legs are extremely short and its movements slow. When numerous on an orange, they give it a characteristic mealy or powdery appearance.

They multiply rapidly in dry weather so that it is necessary for the grower to watch carefully for their first appearance, if he would produce bright fruit.

How to Control

The remedy is sulphur in some

J. Schnarr & Co.

Origin of Schnarr's Spray Formula, its Growth and Development

In 1906 there was no effective remedy for white fly and scale insects in Florida. Grove owners, as is always the case when a new pest makes its appearance, feared the industry was doomed and were anxious to unload. At about this time the late Mr. John Schnarr, assisted by a chemist of national repute, after several unsuccessful attempts, finally perfected a remedy that would kill white fly and scale insects in all stages of development without injury to the tree. Mr. Schnarr having demonstrated by the use of the formula in his own grove that his new insecticide would control white fly and scale insects, other growers readily sought the same remedy. Mr. Schnarr began the manufacture of the formula by hand mixing in very small quantities. The demand increased and soon it was necessary to open a factory, devoting his entire time to the manufacture of the insecticide.

At about the time its manufacture was begun on a commercial scale he formed a partnership with Mr. W. W. Yothers, which continued for one year. After this partnership was dissolved Mr. Schnarr continued the business under its present title. His was the first white fly and scale preparation manufactured in the State. It was so successful that Mr. Schnarr became known not only in Florida, but other citrus sections as well; the formula having continuously been used a number of years in the Gulf Coast satsuma section, Porto Rico and Isle of Pines.

Mr. Schnarr from the time he began the manufacture of this formula practically until the time of his death gave close attention to the development of the insecticide business.

The first users of the formula have

continued its use and at the same time it has gained thousands of new friends. The tremendous increase in the use of Schnarr's during the past few years is due not only to the policy of square dealing, but to the uniformly good results it has given.

The organization has grown with the increased amount of spraying until today the Orlando factory has 12,000 square feet floor space with storage capacity for raw materials and finished products of more than 25,000 gallons liquid, and 100 tons dry materials, while the branch at Winter Haven, being centrally located, affords storage for near-by deliveries in central Polk county and points near-by.

There is located at Florence Villa also a factory with ample capacity for the manufacture of Lime Sulphur Solution and Schnarrs Spray Formula. While Schnarrs Spray Formula—the foundation of the immense business—was for years the only product manufactured other products have been added until the list of all materials needed by the citrus grower and trucker is complete.

A free service department is maintained; the services of a competent entomologist being always available.

One of the many policies of the founder of the business of completely protecting the purchaser against any loss from deterioration of Schnarrs Spray Formula or other products manufactured or offered is followed very closely by the present management. Many instances have been related where materials have been taken back into stock and the purchase price refunded of sales several years old. In this way the grower does not lose the purchase price of spray materials after conditions would not seem to warrant their use.

form. Perhaps the most satisfactory is ordinary commercial lime-sulphur solution. This is diluted with water (1 to 70). Besides killing the rust mites this solution apparently has a stimulating effect upon the fruit, causing it to color up and ripen more rapidly.

A quicker and cheaper method is to blow sulphur dust through the trees. This is usually done by means of a blower. It is better to mix the sulphur with lime, either hydrated

or air-slaked.

Paraffin oil, extensively used to kill whitefly and purple scale, will kill all rust mites hit, but it lacks the ability of the sulphur to kill at a distance.

As the rust mite is liable to appear any time, watchful waiting combined with thoro preparedness is the only policy to follow. Nevertheless, there are seasons for being especially watchful. Perhaps June and November are the most critical months.

Annual Election of Exchange Bodies

At the annual meeting of the Florida Citrus Exchange, held in the Tampa offices Wednesday, June 7, all the officers of the organization were unanimously re-elected to serve for the ensuing year. The re-election of President J. H. Ross was a matter of enthusiasm and acclaim, when his name was presented by D. C. Gillett, who in turn was re-elected first vice-president, and J. W. Ponder of Sarasota was re-elected to the office of second vice-president, and C. E. Stewart, secretary. Others re-elected were W. T. Cavode, cashier, and William Hunter of Tampa, attorney.

Four new directors of the organization presented credentials from their respective sub-exchanges. They were T. L. Haussman of Vero, representing the Indian River sub-exchange, vice H. G. Putnam of Oak Hill; C. J. Stubbs of Fort Myers, for the Lee county organization, taking the place of W. W. Raymond of Owanita; Walter R. Lee of East Lake, replacing J. E. Klock of that place, for the Marion sub-exchange, and F. C. W. Kramer of Leesburg, for the Highland sub-exchange, taking the place of R. L. Collins of Umatilla. Mr. Kramer was seated at the last previous meeting of the board, due to Mr. Collins' retirement because of a physical injury.

Directors re-elected were: J. H. Ross, D. C. Gillett, P. C. Peters, A. G. Hamlin, Dr. Y. E. Wright, J. W. Ponder, S. C. Warner and R. F. Randolph.

President Ross spoke at some length upon the satisfactory progress of the organization, and congratulated the members upon the accomplishments of the past season, when with the largest crop in the history of citrus culture in Florida, nation-wide unsettlement, financial stringency and disturbed transportation and market conditions, it had been possible not only to dispose of the fruit of members at fairly satisfactory prices, but he said the Exchange had scored a substantial triumph by topping the prices of all other Florida shippers to the big markets, where sales are a matter of definite record, by a good margin, grade for grade.

Brief talks also were made by D. C. Gillett and S. C. Warner, which aroused the enthusiasm of the growers in attendance. A report was made to the new board by Sales Manager George A. Scott, which detailed the work of the last season.

Among other things it showed that the Exchange shipments to what are known as outside markets, away from the fruit auction centers, had been increased by over 600,000 boxes during the last two years. Preparations also were announced for the future enlargement of the selling organization for the next season with new territories to be opened for the sale of the fruit of members.

Mr. Scott said that while this last season had been particularly trying, and uncertainty prevailed at all times, he felt it safe to say the citrus growers of Florida had fared better than any producers of perishable products in any other section of the country. He said that with reports showing potatoes from other sections now being practically given away, cabbage piled upon the ground, other produce and fruits unsalable at prices to realize anything for their growers, and latest reports from California to the effect that Imperial Valley cantaloupe growers now were losing 26 cents on each crate shipped, the manner in which Florida's citrus crop has sold was a matter for congratulation.

The next meeting of the board will be the regular monthly meeting for June, which will be held in Tampa June 22. This date was requested by the advertising committee of the board, whose report was unanimously adopted, together with a budget of the advertising program for the coming season.

The report made to the stockholders of the Exchange Supply Company by Manager W. F. Miller on the occasion of the annual meeting created very considerable enthusiasm among more than two hundred growers present. The meeting was held in Tampa Wednesday morning, June 8, at the company's fertilizer plant and warehouses at Seventh avenue and Thirty-fifth street.

The company's total business for the fiscal year ending April 30, amounted to \$2,814,799, an increase of approximately 100 per cent over the previous year. After declaring a dividend of 8 per cent on the company's capital stock, setting aside 10 per cent for surplus fund, providing sinking funds for outstanding bonds, and charging off all depreciation, the company will now distribute \$232,727 as purchase dividends, which will be paid to the buyers in proportion to the amount of their purchases during the year.

Manager Miller announced it was expected during the coming year to

manufacture in the company's own plant approximately three and one-half million orange boxes for the use of the members. The report of Geo. P. Thomas, manager of fertilizer operations, showed 14,000 tons of fertilizers manufactured in the Tampa plant during the year, with an expectation of 20,000 tons next year with newly added facilities.

The machinery department showed most satisfactory operations, with the handling of machinery installations in 29 Exchange packing houses during the year, and much other work. Report from the laboratory maintained in Tampa showed that in addition to handling a big volume of fertilizer and soil analyses, more than one thousand bottles of grapefruit and orange juice had been put up under carefully recorded conditions. It is claimed that when the by-products problem of Florida growers is solved, the solution will come from this well equipped laboratory, which is giving scientific attention to the matter, with carefully kept records of each experiment open to members of the Exchange.

R. E. Lenfest, manager of the horticultural department, was shown by Mr. Miller to have covered the inspection of over 600 citrus groves aggregating more than 15,000 acres during the last nine months. This effort to aid growers in the production of more and better fruit has proven of great usefulness and is growing so popular with Exchange members that the department will be enlarged.

The Exchange Supply Company's showing on its fourth year in business was declared by the stockholders to be extremely gratifying. At the conclusion of the meeting the growers and packing house managers inspected the company's plant and more than two hundred partook of luncheon as the company's guests. In addition to the report of Manager Miller and a most pertinent address by President J. H. Ross, congratulatory talks were made by Mayor Charles H. Brown of Tampa and Dr. L. A. Bize, president of the Citizens-American Bank and Trust Company of Tampa.

All the old officers of the company were re-elected unanimously. The officers and directors now are: President, J. H. Ross, Winter Haven; vice-president, D. C. Gillett, Tampa; secretary-treasurer, C. E. Stewart, Tampa; manager, W. F. Miller, Tampa; assistant treasurer, S. C. Giles;

(Continued on Page 15)

Says Growers Lose After Paying Freight

One of the clearest presentations of the citrus freight rate as it affects the Florida grower and shipper yet made out was shown in the following letter which Senator Trammell forwarded to Chairman Clark of the interstate commerce commission:

"During the past few months I have received a large number of communications and petitions from the growers of citrus fruits and vegetables in Florida, protesting against the present high freight rates and appealing for relief. The advance on citrus fruits and vegetables which was authorized in 1920 has been very detrimental to the growers of my state. The high freight rates are unquestionably more than the traffic can stand, if our growers are to be permitted to have left even small returns for their labor and capital invested.

"While it is true that the market was bad and the prices poor a considerable part of last season, those producing citrus fruits and vegetables had but little net returns remaining even from sales where their products were marketed at a good price. I could bring to your attention hundreds of instances which would illustrate that the present rates are excessive, but I will only mention a few:

"A grower shipped 312 boxes of oranges from Cocoa to New York and the same sold for \$1,594.66, which was a gross of \$5.11 per box. The freight was \$427.69 on this shipment and when to this was added the other charges the grower received \$556 or \$1.73 per box for his fruit, that had sold in New York for \$5.11 per box. This fruit brought an exceptionally good price for the past season.

"The same grower shipped from Cocoa to New York 350 boxes of oranges which sold at \$1,302.61 or \$3.73 per box. The freight on this shipment was \$489.59. After other charges had been added the grower received \$323.81 net or less than \$1.60 per box for fruit which had sold in New York for \$3.73 per box.

"A grower shipped from Wimauma to Washington 374 hampers of lettuce, which sold at \$466.25. The freight on this shipment was \$411.11. After other charges had been added the grower received \$3.80.

"The same grower shipped 330 hampers of lettuce and 66 crates of cabbage to Philadelphia. The shipment sold for \$478.50 and the freight on the shipment was \$434.15. After

other charges had been added the grower received \$10.86.

"A grower shipped 334 boxes of grapefruit from Orlando to Casper, Wyoming. The carload of fruit sold for \$876.10. The freight was \$886.10 or \$10 more than the sales price of the fruit.

"A grower shipped 360 boxes of grapefruit from Fort Myers to Helena, Montana, which sold at \$957.50. The freight on the shipment was \$937.75.

"A shipment of 250 crates of cabbage from Loughman to Birmingham netted the shipper \$27.35. The freight on this car was \$324.97.

"A shipment of 400 hampers of cabbage from Orlando to New York sold for \$587.36. The freight for the shipment was \$434.60. The grower had no net proceeds after paying other charges.

"A shipment from Orlando to New York of 461 hampers of cabbage sold for \$677.13. The freight was \$485.80. After paying other charges there was no net proceed for the farmer.

"A car of melons shipped from Florida to Philadelphia sold for \$200. The freight on the car was \$195.60.

"Thousands of cases could be cited to establish that the present rates are excessive. It must be borne in mind that in addition to the charges in connection with the foregoing shipments that the producers had to defray the expense of all of the work and outlay required to produce the crops.

"It is my information that experts fix the increase of rates on Florida citrus fruits and vegetables at 67 per cent over the rates prior to the increase in 1920.

"I learn through the press that your commission is bringing about, with the railroads, a decrease in rates on certain commodities. One of the commodities mentioned was that of citrus fruits of California. While California enjoys better freight rates, considering the distance of the haul, than Florida has, I think that if the rates are reduced proportionately from Florida and California, that the reduction would be a very proper one. It is my opinion that the rates on citrus fruits and vegetables produced in each of these states should be materially reduced.

"I would respectfully urge that your commission give the most careful and thorough consideration to the situation in Florida, with a view to having promulgated a schedule re-

ducing the transportation charges on citrus fruits and vegetables. Should you desire any further information on this subject than you now have before your commission, I would be pleased to present you with same."

ANNUAL ELECTION

BY EXCHANGE BODIES

(Continued from Page 14)

A. G. Hamlin, DeLand; J. W. Sample, Haines City; C. H. Walker, Bartow; F. C. W. Kramer, Leesburg; P. C. Peters, Winter Garden; A. F. Wyman, Bradentown; R. F. Randolph, Clearwater.

The annual meeting of the Growers' Loan and Guaranty Company, the financing organization attached to the Florida Citrus Exchange, which has for its purpose the financing the crop loans for the Exchange members, was held in the Exchange offices in Tampa Wednesday afternoon, June 8.

The report of Manager C. H. Walker was well received by the stockholders showing, as it did, the successful handling of loans over a wide territory and a very satisfactory state of affairs. The board of directors was increased to eleven members and the regular meetings of the board fixed to be held in Tampa on the Tuesday preceding the regular meetings of directors of the Exchange. President A. V. Anderson, Vice-President W. L. Drew and Secretary-Treasurer C. H. Walker were re-elected unanimously. The new board of directors consists of J. H. Ross, Winter Haven; T. L. Hausman, Vero; Lee M. Hammel, Wauchula; A. G. Hamlin, DeLand; J. H. Sadler, Oakland; D. C. Gillett, Tampa; G. M. Wakelin, Tavares; A. V. Anderson, Avon Park; J. W. Sample, Haines City; W. L. Drew, Eagle Lake; G. B. Ayerigg, Winter Haven.

NEW LEMON PACKING HOUSE

COVINA HEIGHTS GROVES INC.

The new \$24,000 lemon packing house of the Covina Heights Groves Inc., California, was opened with a dinner for the members and their families recently. This house was designed and its construction supervised by Herbert Hamm of Pasadena, Cal. It is 52 by 70 feet inside and was constructed of hollow tile, supported by reinforced concrete sills and cross beams. The roof was of the generally accepted type of truss work, with ample lighting facilities.

Drought, Cultivation and Cover Crops

By J. G. Grossenbacher, in Citrus Leaf No. 8

In Citrus Leaf No. 6, I called attention to the relation of cultivation in holding the moisture for trees and pointed out that dust-mulch cultivation prevents all growth of cover-crop. The general drought of late April and early May showed that trees in dust-mulch groves withstood drought much better than did trees in groves where only enough cultivation was given to keep down most of the weeds and grass. The sequel in this comparison will show up more strongly in a few weeks in that the cover-crop in the dust-mulch groves usually comes up uniformly strong over the grove while in the others it will be ragged and irregular, with bare spots much in evidence. However, the most striking differences in results are always shown in groves where the tree-spread practically covers the middles, because in such cases the leafage depending on the soil for moisture supply has reached practically its maximum per acre.

Nearly every time we have a drought of much consequence the question comes up: why are groves in Florida not provided with inexpensive systems of irrigation, especially since lakes are so numerous? As a matter of fact, quite a number of them are so provided and many others have been. Really injurious droughts occur so seldom that the irrigation systems are allowed to get out of repair between droughts and are of little value when occasion arises for their use. It seems likely, however, if such systems were installed only in groves where they are likely to be of actual value, the practice of irrigation would become very valuable to growers. As pointed out above, water shortage in dust-mulch groves rarely reaches a harmful stage except in cases where tree-density is such that nearly the entire middles are covered by the trees' spread. If irrigation were confined to groves in that state of development, one might expect profitable results, while for bearing groves in general it seems not to have proved so. The reason for this difference seems to be in the fact that with the usual dust-mulch practice of cultivation to prevent water-loss from the sun-exposed middles, enough soil moisture is conserved to carry the trees over the usual dry spells.

The most common damage done to citrus trees by drought is the shedding of foliage and the death of

many leaf-bearing tiny twigs, and in many cases more or less of the young fruit. The loss of twigs and foliage sometimes changes trees from dense to sparse foliage ones in a few weeks. Yet if such trees had been in good tilth and amply fertilized they usually have enough digested foods stored in the bark to develop a full crop of leaves and twigs soon after the rains come later in May. In instances where most of the fruit is also shed, with trees well stocked with food, another bloom often follows the occurrence of copious rains after an injurious drought.

The fact that bark diseases are most common in groves that have become dense or where the trees cover nearly all available ground, and that in some cases portions of such groves that were irrigated during severe droughts failed to develop these diseases while the parts not irrigated developed considerable foot-rot and gummosis as well as scaly-bark, shows that shortage in water supply is conducive to the development of this type of disease. It seems that as long as the area of ground covered by tree shading does not consist of more than about two-thirds of the total allotted to trees the dust-mulch method of cultivation from spring to the rainy season is usually ample drought protection for groves in Florida, while after the amount of shading is greater or covers nearly the entire surface, droughts often prove injurious in the usual high-pine and high-hammock groves. In cases of that kind, irrigation, furnishing large volumes of water under low pressure, would often pay good on investments. In low-hammock and flatwoods groves with good drainage, however, irrigation may even then prove unprofitable.

Dust-mulch cultivation, as noted in the first paragraph, has certain other advantages besides the saving of soil moisture for trees. The frequent stirring of the top soil prevents the germination of grass and weed seeds present. This is particularly true when showers are common during the cultivation season. When growers cultivate mainly to keep down weeds such showers are sure to induce the germination of the weed and grass seeds in the upper soil. The next cultivation destroys the growth; and if this is repeated two or more times between spring and the rainy season there will be but few viable seeds left

in the upper soil. On discontinuing the cultivation when the rains start in late May or early June, the amount of cover-crop that develops is often very slight and of poor vigor. As a matter of fact, the best seeds were allowed to germinate during the cultivation season and the resulting plants were killed by harrowing. Only less vigorous and defective seeds were left for the June rains. In cases of that kind some useful cover-crop, like beggar-weed or cowpea, could be sown about the start of the rainy season but often that is not done, and as a result the middles lie so much sun-exposed during the hot months of June, July, and August that the soil life is largely destroyed.

Although leguminous cover-crops add materially and profitably to the ammonia content of the soil, it is found impractical to use these cover-crops continuously on account of the accumulation of stink bugs that eventually attack citrus trees and fruits to a serious extent. So it is more desirable to use a leguminous crop but one or two seasons and then allow the natural late-summer grasses and weeds to form cover-crops in bearing groves. Crabgrass, crowfoot and the sandspur grasses are the most prevalent ones. When groves are fully fertilized these grasses develop good cover-crops that are exceptionally well adapted to our usual methods of grove care. If this crop is cut once or twice in late summer and early fall and allowed to stay on the land considerable humus is added to the soil annually. In fall these grasses die and thus permit their being incorporated into the soil with the plow. In many cases these grasses are allowed to go uncut until plowing time and thus prevent good plowing, but if they are cut just about long enough before plowing to allow most of them to become severely weathered plowing is not interfered with and the ground turns smooth for the fall harrowing. In the long run the natural cover-crop is probably the best for continuous use in Florida groves.

Remember it is necessary that hogs have an abundance of shade and water during the hot summer months.

Silage is the best known succulent winter feed for dairy cows.

Standard Growers Exchange

The Standard Growers Exchange, one of the very strongest marketing organizations in the state, has its home in Orlando, where it occupies practically the entire fourth floor of the big Yowell-Drew building. In Florida citrus circles no marketing organization is better known than the Standard Growers Exchange.

This strong organization was established in 1917, succeeding H. C. Schrader & Co., who had built up an extensive business in the marketing of Florida citrus fruits and vegetables. From its inception the new organization took a prominent place among the marketing organizations of the state, increasing its business from year to year and gradually expanding its business until it attained its present position of prominence.

The Standard Growers Exchange owns outright 1,500 acres of orange, grapefruit and tangerine groves in Florida. These groves are scattered throughout the citrus belt, including the Indian River section, the Lower East Coast, DeSoto, Manatee and Polk county sections, in addition to its Orange county interests. Besides the groves owned outright by the company, 500 acres are held under long-term lease, which gives the company absolute control of the care and handling of the crop.

The Standard also owns outright 2,500 acres of peach orchards in Georgia and Tennessee and holds long-term lease on 800 acres more. A total of 1,000 acres of vegetable land are owned by this company, most of which are located on the East Coast. The vegetable shipments are handled through the Miami branch of the organization, while the peach shipments from Georgia and Tennessee are handled through the branch office at Macon, Ga., though the accounting and traffic affairs of these branches are handled through the main office at Orlando.

All citrus shipments, purchases and sales are handled by the Orlando office.

But while the Standard Growers Exchange thus owns 5,000 acres of citrus and peach groves and vegetable lands, and controls several hundred acres more through long-term leases, this constitutes but a small part of the activities of the concern. Fruit is handled for the individual

grower in every conceivable manner, either by direct purchase on the tree, by consignment or by extending packing facilities of the organization. The Standard prefers, however, to handle the fruit of other growers by direct purchase on the tree, believing this the most satisfactory method of handling for both grower and shipper. Experience during the past few years has strengthened this belief and growers are being encouraged to place their business with this organization on this basis.

The Standard Growers Exchange owns and operates 27 packing houses. Eighteen of these houses are located in Florida, covering every section of the citrus belt, and are utilized for the packing of citrus fruits and vegetables. The other nine houses are located in Georgia and Tennessee and are used for the packing of the peach crop. With houses thus scattered over the citrus belt, this organization is in position to handle all offerings of fruit expeditiously and to the best advantage, as all houses are equipped with the most modern and approved packing machinery. During the course of a year the aggregate of the shipments of the Standard Growers Exchange, covering its varied field of activities, amounts to millions of crates of fruits and vegetables, requiring the use of thousands of cars for transportation.

This enormous business requires a large and harmoniously organized office force, and the offices of the company at Orlando are always the scene of great activity, for no sooner is one crop out of the way until the handling of another is actively begun.

At the head of this great organization is James DiGiorgio, president, who also is the head of the DiGiorgio Fruit Company of New York, one of the greatest fruit concerns in the country. Mr. DiGiorgio has long been associated with the fruit business in Florida and elsewhere, and as president of the Standard Growers Exchange has been an active force in the citrus field.

Mr. Lawrence Gentile is the vice-president and general manager. He is an expert fruit man and gives much of his time and attention to the citrus situation in Florida. He knows the fruit business thoroughly and is an active member of many organizations which have for their ob-

ject the betterment of transportation and marketing problems.

The acting secretary of the Standard Growers Exchange is Mr. V. B. Newton, an energetic young business man who for two years past acted as assistant secretary. When W. A. Blackman, former secretary, was called to New York recently to become treasurer of the DiGiorgio Fruit Company, Mr. Newton succeeded to the duties of secretary, a post of responsibility and discernment which he is fitted both by nature and training to fill.

The traffic department of such an organization as the Standard must needs be an important feature, and this company maintains what is probably the finest and most elaborate traffic department in the state. This department is in charge of Mr. L. D. Aulls as traffic manager, and occupies finely appointed quarters in the Yowell-Drew building.

During the four years since the Standard Growers Exchange took over the Florida interests of H. C. Schrader & Co., this organization has been closely identified with citrus activities in every line. Owning as it does hundreds of acres of grove property, operating other hundreds of acres under lease, buying fruit direct from the grower on the tree, handling the fruit of growers on consignment and packing fruit in every section of the fruit belt, no concern in the state has touched the industry more intimately or from more angles than the Standard.

As a selling organization, too, with representatives in all of the leading distribution centers of the United States and Canada, the Standard has been in as close touch with the marketing of fruits as with its production and handling in the packing house. This constant touch with marketing conditions and an intimate knowledge at all times of local supply and demand, has enabled this organization to so distribute its offerings as to avoid glutted markets and to secure for itself and its clients the benefit of higher prices ruling in markets in which the demand exceeded the supply.

A continuation of the broad constructive policies which have been pursued by this organization in the past is the promise for the future held out by Mr. Newton in assuming the duties of secretary in succession to Mr. Blackman.

Standard Growers Exchange Representatives

Orlando Territory—Address Orlando Office.

Eagle Lake Territory—Address W. W. Scott, Eagle Lake.

Bowling Green Territory—Address S. A. Carlton, Bowling Green.

Frostproof Territory—Address M. E. Stewart, Frostproof.

Arcadia Territory—Address James H. Jones, Arcadia.

Haines City Territory—Address E. V. Lundberg, Orlando.



BRANCHES MI
MA

CAPITAL \$2,250,000

MR. CITRUS

The welfare of the State of Florida and the welfare of the Citrus Industry is one and inseparable. Likewise the welfare of the growers and the welfare of the Standard Growers Exchange is by no means dissimilar. The strength of our organization is built upon the foundation of service. We are firm believers in the once theory, but now fact, that we were best serving our interest if we served well and faithfully the interest of our patrons. This one feature of SERVICE has been responsible for the growth of the Standard Growers Exchange into one of the largest, if not the very largest organization of the kind in the state.

We have perfected an organization that is second to none in the United States for the advantageous marketing of the fruits and vegetables handled either for ourselves or for our patrons.



A THOUGHT WORTHY CONSIDERATION

While we solicit the business of all growers and marketing their fruit in whatever way they prefer, we prefer to buy their crop outright.

Such a transaction is practically of ease to both shipper and grower. It eliminates all contingencies which are always possible and insures the grower a quick sale, while eliminating many uncertainties and

Now is the time to act—

STANDARD GROWERS

Orlando, Fla.



FLORIDA.

ES MIAMI, FLORIDA
MACON, GEORGIA
L \$2,250,000

IS GROWER:

Our facilities for the packing of fruit are not excelled by any other organization. Our packing plants are the most modern in design and equipment, insuring an attractive package that is worth thousands of dollars each year in added profits to our patrons.

Our sales force represents the very acme of efficiency. We maintain a representative of this organization in every city of consequence in the United States and Canada, thus giving us an accurate check on EVERY market in the entire country EACH day. This feature eliminates the possibility of our shipments going into an ALREADY glutted market.

These things account for the fact that fruit handled by this organization during the past season sold for a higher price than the products of any other like concern.

WORTHY OF SERIOUS CONSIDERATION

as all citrus growers in handling
whatever manner most appeals to
straight from them on the tree.

ly all cases proves more satisfactory
it eliminates the hundred and one
possible when any other method is
a quick, certain profit on his fruit,
and useless expenses.

to act—Investigate.

STANDARD GROWERS EXCHANGE

Orlando, Fla.

Standard Growers Exchange Representatives

Tampa Territory—Address L. M. Godwin, Tampa.

Manatee Territory—Address Orlando Office.

Crescent City Territory—Address R. C. Middleton, Crescent
City

Cocoa Territory—Address Orlando Office.

Ft. Pierce Territory—Address W. H. Drawdy, Ft. Pierce.

Lower East Coast Territory—Address Miami Branch.



V. B. Newton Assumes Duties Formerly Exercised by W. A. Blackman

W. A. Blackman, who has been affiliated with the Standard Growers Exchange of Orlando since 1917, in the capacity of secretary, has tendered his resignation and left at once to take up his duties as treasurer of the Di Giorgio Fruit Corporation of New York City.

V. B. Newton, whose connection with the Standard Growers dates back to his discharge from the service of Uncle Sam in 1919, has been selected to succeed Mr. Blackman.

The Di Giorgio Fruit Company, the treasurership of which Mr. Blackman will occupy, is affiliated with the Standard Growers Exchange, and it is but a larger field of the same concern to which the capable secretary goes with the best wishes of his many friends in Orlando.

Mr. Newton, a young man of exceptional ability, enjoys a large acquaintance and boasts of hosts of friends in Orlando, who will be glad to learn of his promotion. That he was deserving of the confidence and greater recognition of his em-

ployers goes without saying.

The position which Mr. Newton now fills is one that entails considerable foresight and executive ability. The Standard Growers Exchange is one of the largest, if not the greatest independent shippers of citrus fruit in the state. During the shipping season it operates 27 packing houses, employs 3,000 men. It is a \$2,500,000 corporation whose operations are carried on in three states—Florida, Georgia and Tennessee. After the orange season in Florida, its organization devotes its attention to the handling of Georgia and Tennessee peaches.

At Arcadia one of the largest packing houses in the state will soon bear the familiar sign of the Standard Growers. The house is being built to replace the one destroyed by fire at that point during the past winter.

The officers of the Standard Growers are as follows: James Di Giorgio, president; Lawrence Gentile, vice-president; Joseph Gentile, treasurer; V. B. Newton, acting secretary.

**"BOB WHITE" BRAND
LINES UP WITH AMERICAN
FRUIT GROWERS INC.**

Theodore Strawn of DeLand, shipper of the noted "Bob White" brand of citrus fruits, and who for the past two seasons has marketed his output through the Florida Citrus Exchange, has recently aligned himself with the marketing service of the American Fruit Growers Inc.

The acquisition of Mr. Strawn's account by the American Fruit Growers Inc. adds another of Florida's finest brands to the already large volume of high class products marketed by that organization.

Mr. Strawn has approximately 235 acres of bearing groves in Volusia county, a large part of which is in Enterprise seedless oranges. This is the largest block of this variety in the state. As is known to those who are familiar with it, the Enterprise seedless is a very fine orange and commands a premium in the markets of the north.

Mr. Strawn is building a new packing house at DeLeon Springs, which will be ready for operation before the opening of next season. This packing house will be absolutely fireproof in construction and equipped with the most modern machinery and every convenience for the best possible handling of the fruit, including electric marking machines for individual branding fruit of the "Bob White" grade.

Florida's growers generally will be interested in Mr. Strawn's methods. No shipper in the state has a keener appreciation of the importance of the greatest care in every operation in handling citrus fruits, and he enjoys a wide and enviable reputation for the attention which he gives to these details, both in the care of his groves and the harvesting and packing of his products.

To avoid all possibility of injury to the fruit, Mr. Strawn uses specially constructed bodies of his own design on all wagons and trucks for hauling the fruit from the tree to the packing house.

He permits no piece work, either in the harvesting or packing of his fruit, all his labor being employed by the day to insure the greatest care and the best class of work, and to remove the possible temptation on the part of any worker to sacrifice efficiency to speed in any respect.

The "Bob White" brand has for years consistently maintained its position among the very best brands of Florida citrus fruits in all markets where it has been introduced, and

Plant Orange Trees in the Pines

(Note—Mr. H. B. Stevens of DeLand read the following paper at the last meeting of the Florida State Horticultural Society. In former years Mr. Stevens was manager for the Bishop, Hoyt & Co.'s big orange grove at Citra, and, perhaps, has as much experience in planting and the cultivation of oranges as anyone in Florida.)

Having been asked to say something about planting and cultivating, I presume it is desired that I tell of our experience in growing trees in pine woods, with the trees left standing.

About 10 years ago it was decided late in the winter to move some of our trees. As it was then too late to clear the land, or even thin out the pines, we planted our orange trees among the pines without removing them. Those trees are doing well, and we found the pines a great protection during the cold of 1917. They bear every year and the fruit is fine in quality. We dug holes to plant the trees, but have not plowed, harrowed or even hoed the ground. All the cultivation they have received being the mowing of grass when necessary. We use a mineral fertilizer, scattering it on the ground, and do not work it in. We find these trees do not take any more fertilizer than those planted in the open.

This first grove having done so well, we have set another grove among the pines, in every case thinning out the pines, as we thought the first grove had too many in it. In none of these groves do we do any plowing or harrowing, either before or after we plant the trees.

In our old groves that had been plowed for years, we have adopted the same method of non-cultivation. Mow and fertilize, nothing more.

We mow as often as is necessary to cut grass and weeds before they go to making seed; for when they start making seed they begin to draw from the soil—up to that they draw from the air.

But cutting in time, we make them give back to the soil what they have been gathering from the air, thus enriching our land by that much and

for this reason, as well as because of its large volume, is recognized in the fruit industry as one of the most desirable shipping accounts in the state.

supplying plenty of humus. The shading of the ground is also a benefit. Having followed this plan for a number of years, we find that our fruit is of better quality, with the good carrying trait of pineland fruit.

In the fall we make fire lines around our groves, as we did when we plowed, but do not think there is any more, if as much danger under this plan than there has been in other years, as the grass and weeds, cut green, rot quickly and leave nothing but the stubble, which does not burn easily.

My experience has been that soil is looser before it is plowed than it ever is after it has been broken up, except immediately after plowing. Then, too, plowing brings in foreign weeds and grasses which take up more work than the wire grass if left undisturbed.

In 1877 I set some trees in hammock land, and being very anxious that they do well, the next spring I grubbed a circle around the trees out beyond the ends of the roots. The second year I went back to grub a larger hole, and found I was cutting large roots that had grown beyond where I had grubbed the year before.

I saw those roots did not need any loosening of the ground, so I did no more grubbing. To our young trees we gave about one pound of fertilizer to each tree, three times during the first three years; the fourth year increased to three pounds, three times a year.

We think now it would have been better if we had given two pounds each time the third year, instead of only one pound, though the trees grew well and looked healthy. In the spring of the fourth year we noticed some scale getting on the trees; for this reason we increased the fertilizer. We have found that a little additional fertilizer generally frees the trees from scale, but an overdose may cause dieback. We have none of that in our grove at present.

Taking a few acres of Florida land, worth, say, \$100 to even \$500 an acre, planting it to pecan trees, or citrus fruit trees, and making it worth, in a few years, from \$1,000 to \$1,500 per acre, is "going some." But it's being done in spite of assertions, made by some falsifiers, that Florida land "isn't worth shucks."

Foreign Trade and Its Relation to Agriculture

(Address by Allen Walker, Manager, International Trade Department, Guaranty Trust Company of New York, Before Michigan Bankers Association, Detroit, Michigan, June 7, 1921.)

It may seem strange that at this particular stage of our economic life we have to convince any intelligent citizen of the United States of the interdependence of nations and of national and international industry. It is, however, easily possible to have general conception without practical realization of a condition which affects the nation as a whole and which strikes at millions of citizens in the indirect and collective rather than in the direct and individual sense. It is this new condition, or rather our failure to grasp it and deal with it promptly and courageously, as well as our national unreadiness for it, that may be held largely responsible for most of the economic confusion prevailing in the United States today.

New problems, new situations, new relations, political, social and economic, have arisen on all sides in their proportionate contribution to the job of reconstruction which has been imposed upon the shoulders of the peoples whose inherited leadership makes it primarily their task. Government, business, and community leadership in their strivings for general betterment will always have to meet provincialism and insularity among the obstacles which they may expect to encounter. But as a nation it surely does not need to be emphasized that we can no longer be content to live and let live, but must live and "help" live if we are to enjoy the fulness of life ourselves and perform our duty in the interests of civilization at large. While before the war we were a debtor nation in the sum of five billion dollars, we are today the world's creditor in the sum of about fifteen billion dollars.

Our entire relation to the world's business and to the world's interest has completely altered, and some of us have only now begun to comprehend the significance of the change. Regardless of our abstract conceptions, it is certain that our economic machinery—industrial and financial—was not ready for the rapid transformation from debtor to creditor.

Other peoples have always regarded us as a nation of resourceful and adaptable individuals, but these international changes so directly and enormously affecting our economic life have been a little too fast for us. Every banker will appreciate how easily this kind of thing can happen in corporation experience. Advertise a service which you are not "geared up" to deliver, and you will have a very practical illustration of what it means to be called upon to respond to demands for which your internal machinery lacks adequate capacity.

There is not a banker who needs to be impressed with the importance which all these new conditions bear to agriculture—the very basis of our productive life and the source of most of our national demands for continuous industrial energy. It is seldom, however, that we take time to analyze things as they are. We are in the habit of taking more or less obvious things for granted and accepting them as a part of the natural ebb and flow of circumstance.

One-third of the people of the United States are engaged in agricultural pursuits. Our selective draft demonstrated this proportion. Out of 55,560,863 workers, 19,271,834 were engaged in agriculture, forestry and fisheries when the selective draft was organized.

The value of wealth produced in the United States by farms during the year 1919 was \$24,982,000,000. It is estimated that there are seven million farms in the United States. The census of 1910—more than a decade ago—showed the value of our farm properties to be \$41,000,000,000. This, of course, has greatly increased since then. In 1919 our food exports were in excess of 34 per cent of the total exports of the United States. During 1920 we exported more than two billion dollars' worth of food stuffs, or a little more than 25 per cent of our total exports. We exported \$1,137,000,000 worth of cotton. Our exports of the products of our farms during 1920 were about 40 per cent of the total of all our exports. It is estimated, on the basis of the production of 1919-1920, that farm property in the United States today has a total value of between

80 and 90 billion dollars. The value of farm products for 1920 is estimated at \$19,856,000,000—100 per cent more than in 1914. Ever since we became an exporting country, food exports have always represented between 20 and 30 per cent of our total surplus merchandise sent overseas. With cotton added, our farm products sent overseas have been between 35 and 45 per cent of the total of our exported merchandise.

The farmer himself has only just begun to realize the significance of foreign trade to his sustained prosperity. He has always seen his individual market apparently close at hand. He has never troubled himself about the proportion of his product consumed here or somewhere else. He has concerned himself only with the problems of sustained demand and price, and has generally felt that he could safely dismiss from his mind the troubles of Europe, Asia, Africa and the rest of the world as having no direct relationship to himself. Today, thoughtful men all over the United States are endeavoring to make it clear that every man, woman and child in this country is vitally, directly and individually interested in what takes place all over the world by reason of our changed relationship to the rest of the globe; and such problems as "trade balances"—hitherto regarded as mysterious entities belonging to the exclusive realm of the economist—are being explained in A. B. C. language, with the hope that universal absorption will lead to a better understanding of the responsibility which is that of every American today.

Did you ever stop to consider the vast and systematic movement of commodities over trade routes and sea lanes, caravan trails and mountain passes which takes place as a matter of daily routine? The mills of Dundee in Scotland, for example, feed the jute producers of India. From Yucatan and from the Philippines hemp reaches the cordage mills of every country. The leather industries of Europe draw on almost every grazing area in the world for their supply of hides and skins. The oil mills of Southern France absorb the supplies of cottonseed, soya beans, peanuts, sesame, rape seed and palm

kernels from a hundred different sources. A considerable proportion of the cattle food of Europe's herds comes from oilcake, the by-product of these cotton, bean and other similar oil bearing seeds. The silk mills of Europe and of the United States get their raw materials, in large part, from China, Japan and Italy. Our own greatest world exports of raw materials have been cotton and mineral oil and tobacco, in addition to grain, meats and—during later years—coal.

What it means to our Southern cotton plantations when the textile mills of England and Central Europe are shut down or running at 30 per cent capacity is expressed by the present carry-over of seven million bales of cotton from last year's production, with a new crop of seven to nine million bales coming in. What the restricted consumption of the population of Europe and the restricted buying power of all the rest of the world means to our producers of grain, metals and other raw materials is expressed in frozen credits and congested warehouses all over the United States. The present crisis originated with a surplus of raw products, and it is delivery from the gloom of this particular kind of crisis that we are especially considering today.

The fact that we have not awakened to the complete meaning of our new status in world affairs and of the reactions of international and economic forces is evidenced on every hand. Only a few weeks ago, for example, farmers' organizations petitioned President Harding and the Interstate Commerce Commission to readjust railway rates to the pre-war basis, and brought pressure on congress to pass the emergency tariff bill. The farmers also sought the president's aid to obtain a general decrease in Federal Reserve Bank rediscount rates based on farm commodities, and a large increase in Federal Reserve notes. A bill was introduced in the house of representatives proposing to limit the interest chargeable by the Federal Reserve banks. Organized labor has been seeking to maintain war-inflated wages and special problems relating to hours and conditions of employment seemingly unconscious of the fact that national, political and economic forces which made such wages and problems possible have been supplanted by equally irresistible forces of deflation.

A systematic campaign to bring about lower Federal Reserve discount

rates and increase the volume of our currency was recently launched in Washington by a group of senators from western and southern states. The specific objectives were a general decrease in rediscount rates based on farm commodities from 7 to 6 per cent, and an increase of one and three quarter billion dollars in Federal Reserve notes. There was also referred to the house committee on banking a bill which would limit the interest chargeable by the Federal Reserve banks to 5 per cent per annum.

Both this bill and the campaign just referred to are economically unsound, as is the emergency tariff bill, and once more demonstrates the crying need for a better general understanding of elementary economics throughout this country. Wholly aside from the question of whether paper based on farm commodities merits a preferential rediscount rate—a question which the Federal Reserve board is fully able to determine—the fundamental mistake lies in the effort to bring political pressure on the Federal Reserve board, which should be as free from such considerations as the United States Supreme Court. The policy of the Federal Reserve board should and must be determined by economic factors alone. The passage of the bill which proposes to limit interest rates of the Federal Reserve banks would revive currency inflation and deprive the Federal Reserve banks of all power they now possess for controlling inflation. The inevitable result would be to recreate the possibility of money panics, one of the chief things the Federal Reserve system was designed to prevent.

Our farmers must remember that while they have borne the brunt of deflated prices so far and the average price paid to the producers of principal crops in this country on April 1 was 58 per cent lower than a year ago, the forthcoming crops will be raised cheaper than the crops of the last few years by about 25 per cent. The supply of farm labor at the beginning of May was 95 per cent normal, as compared with 72 per cent in May, 1920, and 84 per cent in May, 1919. Farm wages are from 25 to 35 per cent less than last year.

Leading men in the farmers' organizations have been informing us that the primary problem of the day is the organization of machinery to move our exportable surplus. True, but the problem is far deeper and more comprehensive than that. Sustained national prosperity is built

upon a properly balanced trade situation, a situation in which buying and selling and paying in both domestic and foreign fields will meet upon a basis intelligently worked out and logically arranged, instead of upon one which lacks important fundamentals and is filled with dangerous fictions. The important thing is balance. Any tendency which leads us away from a condition of balance indicates the possibility of danger, of disproportion, of things which must be overcome or removed. It is not difficult to give the meaning of a surplus and to say that a surplus which cannot be disposed of profitably is worse than no surplus at all. It simply takes up space and time and clogs the national machinery. We have a surplus of products of various kinds in all our major industries—raw products, partly finished and finished products—and we will continue to have unprofitable surpluses unless we develop the practical side of this problem of trade balance, make increasing effort to create new markets and at the same time cultivate the habit of buying in the markets in which we expect to sell. There is no other effective way.

We have heard a great deal of discussion about the necessity for curtailing production. Could we do it without bringing on stagnation with all the attendant evils of dislocation of enterprise, unemployment, and always the danger of social and political unrest?

Let no man dream that any problem is to be solved permanently by the artificial curtailment of the natural growth of production capacity in a country whose industrial organisms have been geared up to an established pace. Our production capacities will continue to increase. Our powers of consumption will increase, population will grow larger, new needs will be discovered and new tastes acquired. But with all the increased domestic consumption which we may logically expect, it is certain that production will outrun any possible increase in domestic consumption. The United States is headed irresistibly towards a continued and increasing surplus of production which must be disposed of abroad. Prosperity means intelligent and continued activity. It is a simple question as to whether we shall continue to expand and provide for increasing exports or scrap a great deal of our national machinery and the assets tied up in same. Shall we continue to move forward or try and adopt artificial means whereby we

may turn the clock of progress backwards? Is there any difference of opinion in answer to this question? Other nations have tried to stop the clock, but never once with success.

In the long run, the farmer will profit most not by seeking to increase the price of his products by artificial means and economically unsound devices, but by exerting his powers to effect a readjustment of commodity prices and production costs to a fair, stabilized basis. His trouble today is chiefly maladjustment, and the solution of the problem is balanced readjustment. The farmer has most to gain finally by producing as much primary wealth as his land will yield, because prosperity for us all is essentially based on production. If the period of deflation through which we have been passing has taught our business men anything, it should have impressed upon them the absolute necessity for adequate financial reserves to take care of the "lean" years that follow the "fat" years. Many business corporations have depended too much upon the banks in the last year or two to meet exceptional situations. Such corporations did not create a sufficient surplus for the exigencies which occurred and were long foreshadowed. I have lately heard many critics among business men concerning the rigidity and restrictive attitude of the bankers of this country, based, I believe, not upon realities but upon a too-common ignorance concerning the logical and legitimate functions of any and every commercial bank. That is one of the paths along which we need a good deal of elementary education. We must all understand the necessity that rests upon us to work out our salvation upon a new basis of values. One of our principal difficulties is that we have not all visualized that cardinal fact.

It is in recognition of the need for expansion rather than for curtailed activity that thoughtful men everywhere are endeavoring to find means whereby we can equip the national machinery to handle an ever-increasing export trade. We need expanded markets over the entire globe with highly organized statistical information whereby producers and manufacturers may more dependably estimate the world's demands in advance and properly provide for same.

Practically all of the new equipment to which most serious consideration is being given today relates to long-term credits oversea. But in discussing the question of foreign credits as they apply to agriculture, we cannot consider them in the mass.

THE CITRUS INDUSTRY

We must divide them into two kinds:

1—The financing of food.

2—The financing of other agricultural products which enter into industrial enterprise.

Wheat is an illustration of the first. Cotton illustrates the second. The wheat movement in the main has been on a short-term basis for the reason that food is consumed quickly and no long credits could be based upon it. When credit is to be issued for food products, it has to be either straight credit to the government or straight credit to the foreign importer, secured by collateral of proper value.

When it comes to the consideration of cotton or other agricultural products which enter into industrial enterprise, the consideration is different. Longer credits must be provided for these products secured by the property itself and followed up until the product is completed and sold as a finished or semi-finished manufactured article and return then made to the loaner out of the proceeds of the ultimate sale.

This is but a brief sketch of the different methods of financing agricultural products of distinct classes, but I think it underlies our discussion of foreign credits and brings home to us the fact that in the case of food, the financing required covers that of production and bringing it to market, while in the case of cotton and other agricultural products, financing may be required not only to produce and bring the commodities to market but also to carry them in foreign markets either directly or indirectly pending manufacture.

You are all familiar with the proposed Foreign Trade Finance corporation, so I will not trouble to go into that question here, save to mention it along with other plans already indicated as devices for solving the problem of getting rid of our exportable surplus. A new proposition has just been developed for the creation of a hundred million dollar corporation—similar to that of the War Finance corporation—calculated to deal exclusively with agricultural products. All of these efforts—experimental for the most part—are symptoms of our growing pains, of our unreadiness for the rapid change from a debtor to the creditor nation, and of our desire to play the part of the giant we have grown to be. To what extent any of the devices created to give us the financial equipment we need for an extended foreign trade will succeed, time alone will tell. It is an evolutionary process which cannot be rushed. We shall be stronger

and surer in our world position ten years hence if we watch our steps now. These propositions are receiving serious consideration in Washington and by financial authorities everywhere, because the need for relief is very real indeed. The normal credit structure of the European market—with its reaction upon other markets of the world—has been smashed to pieces by the devastating blast of war and can no longer be relied upon by the trader and manufacturer for the support of commerce with America. It has been obvious to us all for sometime that ordinary measures are quite inadequate, and yet in recognition of the fact that our national financial machinery requires new and improved links in the chain to make it strong enough to bear the new burdens imposed upon it, it is necessary that we move slowly and not rush into the adoption of artificial devices whose operations may not be in accord with the regular processes of worldwide supply and demand.

The American holders of cotton have announced their willingness to accept any reasonably safe plan that will restore a market for their product. They recognize that the situation calls imperatively for concessions on their part as to credit and that this credit must necessarily be for terms of far longer duration than would be considered practical in normal times. The international bankers have endeavored to make it clear, however, to European consumers as well as to the cotton growers themselves that it would be very unwise for the producers to exchange their cotton—which they have long been accustomed to regard as collateral of unquestioned value—for promises to pay based upon a security about which they are compelled to have most serious doubts. Neither can American producers look with favor upon proposals that they ship their products into countries where political stability is so far from being attained that they can hope for little protection of their interests through any guarantees or assurances given by the governments of those countries. While every agriculturist in the United States today urgently needs to utilize every possible outlet for his products, still he must not be tempted into relinquishing his control of them unless safeguards, not now found in certain markets, can be organized for his protection. He rightly requires that before he ventures into such markets he shall be assured of his definite control of and at all times complete title to his

goods until payment has been made, however far these goods may go from home ports and however far advanced they may be into manufacture in foreign factories. It is necessary that the foreign importers shall appreciate these facts and consider the methods that must be adopted to protect the American exporter whose conservative practices have been established over a long period of years.

So much for the question of sales and payment of our agricultural products, except to say that I think a little more attention might be given to the necessity for combined effort between the producers and the manufacturers of the United States in regard to the expansion of foreign markets. There should be a united and unceasing effort to expand markets and create new outlets for American goods, for as I have already stated, only along this line may we find the basis for sustained national prosperity.

In this definite respect, we come back to the world problem of trade balance. "Trade balance" is a term frequently used with too little understanding of what it really means. When our exports have exceeded imports we have become accustomed to the use of the term "favorable" trade balance; whereas in reality we know now that a great excess of exports over imports, plus unbalanced exchanges over the world, can be anything but favorable for the citizens of this country. How are we paid for our exports? We are paid through our own purchase of foreign products. Of course, this is not all of the story. Other elements enter into the case, but in simple language we are paid for what we sell by paying for what we buy. The logical answer to exports is and always will be—imports. The one demands the other and we must never permit them to separate themselves in our consideration of this whole problem of trade balance. When we talk of export without consideration of import we only discuss the problem lopsidedly and see but one part of the picture. The truth of the matter is that most of us like export and we like to talk about its potentialities. We do not like import quite so well. Selling our goods in foreign markets suggests something desirable. Having foreigners sell their goods in our markets suggests something undesirable. Towards exports our minds are always open. Towards imports our attitude is always defensive. But by this attitude we are splitting a situation which should be kept intact. As a matter of fact, when we admit we

like export and are not so fond of import it is like saying that we want the chance to sell without ever being obligated to buy.

When we speak of imports we think about trade competition. We lose sight of the fact that foreign products are sold to us only because we wish to buy them and because we need them. We import only the things we can utilize to advantage. We certainly do not import that which is not desired by some portion of the population. We are all interested in the reciprocal game because involved in it are all the problems of living costs, fair prices for the things we must buy, of reasonable rates of taxation and all the other things which contribute towards a sustained national prosperity and a happy condition of life for every American citizen.

I have taken time to refer to this question of trade balance because I want your consideration of what to my mind is a very definite necessity, and it is this: That in the United States today we have no right to discuss problems of tariff and the protection of American products—allegedly in the interests of the producers—without giving primary consideration to the means whereby we are to help strengthen the buying powers of our foreign consumers. That is the paramount problem of the hour, and any man who evades it is departing from first principles. Not all the artificial methods nor legislative "stunts" that can be devised can alter this situation. We must face fact with fact, for no amount of legislation can change the processes of economic law, nor can political expediency ever serve the place of constructive statesmanship.

It is important that every man, woman and child in the United States today shall understand that "we must" enable the rest of the world not only to pay its debts to us but to function industrially and to produce and sell profitably anywhere and everywhere, including our own markets. We must scale down "our" production costs by the expansion of markets and by economic processes rigidly and thoughtfully applied, realizing that the question of balance of trade is vitally more important in the long run than the mere volume of products we can manage to sell during a few prosperous years.

Let us try to win the attention of our citizens to fundamentals and away from superficialities and artificial devices which cannot be made to stand up against elementary economic truths. Upon what happens

in our attempted solution of a few of these primary problems during the next twelve months, to my mind depends the speed of reconstruction of the whole world for the next ten or twenty years. The future will largely be what "we" make it, for agriculture, for all industry, indeed for all America and for a very substantial part of the entire globe.

SKINNER GETS VERDICT;

STANDARD TAKES APPEAL

A decision of great importance to the citrus industry of Florida was rendered in the United States district court at Jacksonville recently by Judge William B. Sheppard in patent suit of the Skinner Machinery Company of Dunedin against the Standard Growers' Exchange of Orlando.

The proceeding was on account of alleged infringement of letters patent involving fruit sizing machinery and the complaint asked for injunction and for alleged damages. According to the testimony introduced, the points at issue affect directly or indirectly almost every grower of grapefruit and oranges in the state.

Judge Sheppard rendered his opinion from the bench, signing an interlocutory injunction, enjoining and restraining the defendant and its employees from using the machines involved in the suit and located in its various packing houses, which were held to be infringements. It is stated that approximately one-third of the citrus sizing and grading machinery used in Florida will be affected.

The court sustained all the claims made in the pleadings of complainant and the decision left no doubt as to the validity of the patents. The alleged infringement, it was claimed, extended over a period of four years. The court order also provides for the appointment, at a later date, of a master to ascertain the damages to the plaintiff in the case, which the defendant will be required to pay.

Appeal from the decision of the lower court has been taken by the Standard Growers' Exchange and the final decree will be awaited with interest by Florida citrus men.

CORRECT

Officer: Can you define discipline?

Soldier: Yes, sir; it's the uncomfortable feeling you have when your superior officer is around.—From Strix, Stockholm.

Prevent sore shoulders on your horses and mules by seeing that dirt, sweat and hair do not accumulate on the collar and collar pad.

Poultry in the Citrus Grove

By Geo. T. Tippin, Vero, Fla.

It has been wisely said that "it is not advisable to put all your eggs in one basket." It is equally the part of wisdom to put some eggs in the basket. There is probably no one who is engaged in farming and fruit growing who can combine poultry raising with other lines more profitably than the citrus grove owner in the citrus belt of Florida. Climatic conditions here are most favorable for successful poultry raising and it is proving quite profitable where conducted upon up-to-date methods as a special line, but can be made more successful when combined with the citrus grove.

It has been demonstrated by the members of the girls' poultry clubs of Florida that poultry will yield a greater net profit on the amount invested than any other industry, and that, too, without giving the poultry credit for the benefits they would contribute to the citrus grove, which is also a real asset. It has long since become an established fact that poultry proves advantageous in apple, peach and other deciduous fruit orchards, as they destroy many injurious insect pests. While there are no codling moths or curculio beetles that destroy citrus fruits, there are numbers of foliage destroying insects

that the poultry will assist in controlling.

A neighbor of mine in Missouri, years ago, before the apple growers were educated up to the necessity of thorough spraying for codling moths, objected to a party across the lane allowing his turkeys to range in his commercial apple orchard. When packing time came in the fall, the only apples in the orchard fit to pack were on the side next his neighbor whose turkeys had destroyed the larvae of the first brood of codling moths, thereby saving the crop from the second and most destructive brood. Objections were withdrawn and the neighbor requested to increase his flock and range the entire orchard the next year.

A citrus grower in California in a recent article says he has found the combination of citrus growing and poultry to be both practical and profitable. This combination is especially suited to the owner of small acreage of grove or one who is starting to grow a grove of a few acres. The grove can be used for the range of the flock.

The manure from a flock of two hundred hens, carefully saved, composted and sterilized, will very materially reduce the fertilizer bill in growing a grove to bearing age.

With fairly good grove land two hundred hens would probably furnish sufficient fertilizer for five acres of young trees, and would be proportionately valuable for bearing trees, but would not be sufficient for so many.

I have found that chickens are more easily raised here in Florida than any other part of the country that I know anything of. Judging from the five years that I have been in Florida, I think \$600 per year net profit from two hundred hens would be a conservative estimate, where properly handled, especially if most of the feed was raised at home, which can be done in most localities. This in addition to grove benefits, fresh eggs for the table at home every day, which are more healthful than meat, young fryers through the week, a baked hen for special occasions, is why I believe that poultry is one of the most profitable accessories to the citrus grove and that every grove should have a good flock of chickens and other fowls in connection.

The fact that hens can be kept at full laying capacity in Florida during the winter season, while they are on a strike in the northern and central states, will always insure good prices for eggs, as fresh eggs are always at a premium over cold storage eggs.

Market for Lemon Juice

By An Advertising Man

To a layman who has only a consumer's point of view on the lemon industry, it appears that there is a country-wide latent market for pure lemon juice, lying all untapped for the man with the initiative to tap it.

The recent lemon shortage has brought the following queries to mind and led to the writing of this brief article.

Why do we continue to ship lemons from California to New York in crates, when there is certainly a better way? Why do growers and jobbers endure the loss of lemons spoiling enroute; being forced to sell at any price on glutted markets; and making a good profit only when the demand is keen? Why don't the growers realize that it is when the consumer wants lemonade that he would like to be able to buy them, and not when there is no demand for them and lemons sell for a song?

The reason for continuing in the old channels may be found in some

obstacle confronting the manufacturer who attempts to bottle lemon juice; or it may be that nobody ever thought of it before. Surely, though, someone must have thought how nice it would be to slip a bottle of pure, unadulterated lemon juice in the camp kit and make the lemon squeezer, so liable to be left at home, an unnecessary luxury. Or, how nice it would be for the wife to be able to hasten her culinary processes by cutting out the rolling and squeezing of lemons.

Since we come to think of it, the advantages of being able to have lemon juice available from a bottle, are almost unlimited. Think of the convenience of serving it like vinegar, for use in ice tea, for fish or salads! There is something just a trifle objectionable to the present system of serving the bit of lemon for this purpose, as it compels the guest to bathe his finger tips with the juice, before he can enjoy the

citrus flavor. Speaking of vinegar, why don't we use more lemon juice in the place of vinegar? It is certainly more palatable in many dishes, and there is no question about the healthfulness of it? Doesn't the getting of the juice from the rind have some influence upon its non-consumption?

In addition to the advantages from the consumer standpoint, there are merchandising advantages by the score.

The freight saved in transportation would doubtless more than offset the manufacturing cost. The distribution of the supply can be governed by the demand instead of by the ripening season, which seems to be the case at present. Spoilage enroute would be entirely eliminated.

Shrivelling and other deterioration in the dealers' hands would be a thing of the past. It would permit of the selling under the standard trade-mark of the individual who

markets the product. Deterioration in the housewife's hands would be lessened or eliminated.

The market is there, waiting and ready to be told about the new product—and sold. Where is the man who can produce the goods?

Someone, some day, probably the chap who doesn't know enough about the technique of lemon production to know that it can't be done, will put the big idea over.

For the good of lemon lovers, let us hope.

EXPEDITION WILL SEARCH FOR EGG OF BLUE GOOSE

Under date of June 11, the Associated Press carried the following news story, sent out under a Boston date line:

A hunt for the egg of the blue goose will be one of the odd errands of the Donald B. McMillan expedition to Baffin Land this year if the hopes of ornithologists are realized. The adult blue goose, a variety with a grayish brown body that gets its name from the blue-gray of its wing coverts, is not uncommon in the United States but its breeding haunts have been a subject of much speculation among bird lovers and its nest and eggs have never been observed.

An announcement by Dr. McMillan that on his last trip to the Arctic he had noticed fledgeling of these geese aroused the interest of students of bird life with the result that one of the scientists who will accompany the present expedition will be commissioned to be on the lookout especially for blue goose eggs in connection with his other field work.

The price that one of these eggs, hitherto unseen by civilized man, would command, has not been quoted but judging from the enthusiasm displayed in natural history societies over the subject, the goose that laid the golden egg will have nothing on this bird.

Baffin Land is believed to be the greatest breeding place of bird life in the far north. In its 150,000 square miles of interior unexplored by white men are lakes which the Eskimos describe as six days' sledge journey in length, (at least 100 miles) and abounding in wild-fowl.

The McMillan expedition will leave here in July in the Schooner Bowdoin specially built for the purpose and will spend probably fifteen months in a study of Baffin Land along various scientific lines.

THE CITRUS INDUSTRY CLASSIFIED ADVERTISEMENTS

The rate for advertisements of this nature is only three cents per word for each insertion. You may count the number of words you have, multiply it by three, and you will have the cost of the advertisement for one insertion. Multiply this by the total number of insertions desired and you will have the total cost. This rate is so low that we cannot charge classified accounts, and would, therefore, appreciate a remittance with order. No advertisement accepted for less than 50 cents.

THE CITRUS INDUSTRY,
411 Curry Bldg., Tampa, Florida

MISCELLANEOUS

We Collect Accounts, Notes—Claims, anywhere in world. No charges unless we collect. May's Collection Agency, Somerset, Ky. 6-20—2t

NURSERY STOCK

EARLY BEARING Papershell Pecan trees, budded or grafted and guaranteed. Great shortage this year. Write for catalog today. Bass Pecan Company, Lumberton, Miss.

Citrus Trifoliata Seedlings: 10-12 inches \$10.00 per thousand; 12-18 inches \$15.00 per thousand; 18-24 inches \$20.00 per thousand. Griffing Nurseries, Port Arthur, Texas.

HUGE PROFITS FROM OIL.—We tell you how to accumulate a fortune by proper investments. Free publication with authentic information and maps. Write Hasselquist & Borgert, 710 Montana Bldg., Lewistown, Montana.

Make your own paints, varnishes, stains, turpentines, oil and shellac at one-half the dealers' price. Complete set of all these formulas for 35 cents. Wm. McDermott, 6521 South Justine St., Chicago, Ill.

GREAT BARGAINS in coon, Fox, Wolf, Skunkhounds, Collie and Shepherds. Puppies of all breeds. List, 10c. NORMAN CRAWFORD, Downing, Mo.

REAL ESTATE

LOOKING for Florida property for home or investment? Fruit, truck, poultry or stock farms? Orange groves, winter homes? Write Dr. Fellows, Newburyport, Mass. New England agent Crystal Lake Subdivision. Apr.—3t.

FOR SALE—Choice California citrus lands. One dollar per acre monthly. R. B. Davy, Hayward, Calif. Nov.—2t

For Sale—10 acres citrus land at Roseland, Indian river, \$50 per acre. Boon, 127 Gray Court, Birmingham, Mich.

WANTED—To hear from owner of land for sale. O. K. Hawley, Baldwin, Wisconsin. 1t

RABBITS

Read "RABBIT JOURNAL," St. Francis, Wis. Two years \$1 trial 25c. 1t

POULTRY

BRED-TO-LAY SINGLE COMB RHODE Island Reds. Eggs, \$3 for 15. From selected colors. T. M. Montgomery, Starkville, Miss.

27

S. C. RHODE ISLAND RED EGGS of fine quality, 3, 4 and 5 dollars per 15. Prize winners. Miss Erma Louise Singleton, Box A, Dubard, Miss.

SEEDS

RAISE YOUR OWN FRUIT—100 Dunlap and 50 Everbearing Strawberry plants delivered for \$1.50; 100 Palmeto Asparagus plants delivered for \$1.00; 50 Cumberland Black Raspberries for \$1.75. Apple 50c, Peach 40c, Cherry 65c. Larger amounts cheaper by express. STERNERS FRUIT FARM, Monmouth, Ill.

Wanted—Will pay highest cash price for Dasheens, Pigeon Peas, Mangoes, all other tropical fruit and produce. S. Rosen, 7 East 135th St., New York City. Aug. 1y.

Gigantic Climbing, New Guinea Butter Bean.—The new edible vegetable wonder. Grows 3 to 5 feet long, weighs from 10 to 15 lbs. Very palatable and nutritious. Everybody wants to grow them. Fine for trellis, ornament old fence, etc. Guaranteed as advertised, or money back. Pkt. seed 50c and 25c sizes. Musketopunk Co., Dept. N, Pekin, Ill. m-3t



Water on Your Farm
The "H" Junior Pumping
Unit will supply it

A combination gasoline engine and pump. Price \$140 f.o.b. factory. Agents wanted.

South Florida Foundry & Machine Works, Mfrs., ORLANDO, FLA.



Many Rare Palms and Plants

of all leading kinds, are growing luxuriantly in our nurseries awaiting your selection for transplanting to your home grounds.

There is no finer collection of tropical and sub-tropical plants, trees and shrubs in America than we offer.

Write for free copy of our "Tropical Grounds Book." It will help you in your planting plans.

REASONER BROTHERS
Royal Palm Nurseries
ORONCO, FLORIDA

EAGLE "MIKADO"

Pencil No. 174



For Sale at your Dealer

Made in five grades

ASK FOR THE YELLOW PENCIL WITH THE RED BAND
EAGLE MIKADO

EAGLE PENCIL COMPANY, NEW YORK



Proven Service

The discriminating grower expects a super-service from the marketing organization which handles his products. This is rightfully so, for the very nature and perishability of his products make such service imperative.

Constant, vigilant, sincere interest; thorough knowledge of the markets and their reactions to various conditions and influences; prompt, intelligent distribution and expert salesmanship—these are all points of efficiency which the progressive grower of right demands.

A marketing organization fulfills its proper mission in the scheme of economic production and distribution only as it is able to measure up to these requirements. The day of haphazard methods is gone. Thorough efficiency in marketing is absolutely essential for satisfactory results, and of necessity RESULTS are what count most with every grower.

The American Fruit Growers, Inc., strives to fulfill this mission. The high character of the service it renders is proven by the results which it has obtained for its clients.

AMERICAN FRUIT GROWERS, INC.

ORLANDO, FLORIDA





Attracts Distinctive Brands

A marketing organization is judged both by the nature of the service it renders and by the character of the accounts which it handles. High class accounts are attracted only by superior service.

The American Fruit Growers, Inc., feels a just pride in the character of the citrus fruit accounts which it handles. In every section of the state, whether it be on the East Coast, the Ridge, the West Coast, Central or South Florida, the American Fruit Growers, Inc., numbers among its clients the BEST citrus growers of the section.

Others of the largest and finest citrus accounts in the state are constantly being added to this list. Within the very recent past both the Stripes Citrus Packing Company, of Fort Myers, shippers of the "STRIPE" brand, and Theodore Strawn, of DeLand, shipping the "BOB WHITE" brand, have aligned themselves with the marketing service of American Fruit Growers, Inc.

These brands have a national reputation. Nothing less than the most expert service would be satisfactory to such shippers as these and the other similar accounts which the American Fruit Growers, Inc., handles in Florida.

We are prepared to render you this same high class service in the marketing of YOUR fruit, and we suggest that you get in touch with us promptly.

AMERICAN FRUIT GROWERS, INC.

ORLANDO, FLORIDA



REFRIGERATION WITHOUT ICE

Few persons realize the extent to which evaporation may be depended upon to cool things. In the manufacture of ice it is the evaporation of ammonia which freezes water.

The evaporation of water is slower and will not often produce a freezing temperature, but it will take the place of ice for ordinary refrigerator purposes, if means for utilizing it are properly planned, says A. P. Spencer of the Florida Agricultural Extension Division.

A wooden frame may be made and covered with canton flannel, the smooth side out. Pieces of cloth thrown over the top will act as wicks to take water from a shallow biscuit pan set on top of the refrigerator and communicate it down the cloth sides by means of capillary attraction. The evaporation from the damp walls cools the interior and, if it is tight and the door fits snugly, the temperature may be greatly reduced, sufficient to keep butter, milk and meat in fine shape. It sets in a pan to catch the drippings.

The cooler may be of any size. For convenience it should be made just large enough that a large bread pan will sit down in the top. To get the best results it should set in the shade and in a draft.

If further details are needed for its construction, ask your county or home demonstration agent, or write to the College of Agriculture, Gainesville, Fla.

AN OUTLET FOUND FOR OLD

LEMON AND ORANGE TREES

A commercial use is being made of orange and lemon wood in Ontario, Cal. The American Art Wood Company has a mill at the corner of Main street and Campus avenue which has a capacity of handling 8,000 feet of lumber a day.

Special machinery is being installed for the making of dentists' and doctors' sticks and tools of orange and lemon wood. For this kind of material there is quite a demand. Most of the material has been imported in the past, but J. A. Hamilton, manager of the company, by testing it out found that the wood from California citrus trees is at least equal if not superior to that obtained anywhere in the world. He sent back east samples of the product and received one large preliminary order, which has been followed by several others.

Remember, a cow that produces a large flow of milk must be fed well.

White Fly, Scale Insects and Rust Mites Last Year Caused A \$2,000,000 Loss

Control these destructive pests on your trees. Protect and increase your fruit by THOROUGH spraying with the right materials. Make your plans NOW. Get ready to start your spray schedule on time.

Use This

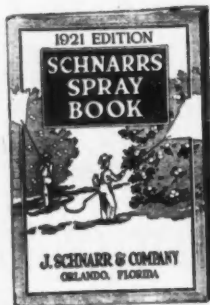


With This

Schnarrs Spray Formula and Niagara Soluble Sulphur Compound is the ORIGINAL combination spray for white fly, scale insects, rust mites, red spider and scab. Effective and more economical because you get the benefit of two applications at one-half the labor cost.

Used by largest and most successful growers continuously for over ten years. Don't experiment. Soluble Sulphur is the ONLY sulphur compound which is considered SAFE to use with oil emulsions. Place order at once—be prepared, don't risk delays. Mail the coupon today.

J. SCHNARR & CO., Orlando, Fla.,



Please mail copy of 1921 edition Schnarrs Spray Book and complete price list. I have

.....grapefruit trees..... yrs. old

.....orange trees..... yrs. old

(Name)

(Address)

J. Schnarr & Company Orlando, Florida

Specialists in Sprays, Sprayers and Spraying

Established 1906

